

Following a digital boom, India's cyber security sector is seeing an exponential growth. 2020 has been a year like no other for all of us, and the COVID-19 pandemic has made its presence felt in the world of video distribution as in all other aspects of life and society. In the new era of "remote everything" businesses and consumers need to be online more than ever, since connectivity becomes a daily necessity. Embedded SIM or eSIM is a new technology built into smart devices enabling wireless connectivity to be acquired and activated digitally without using any physical hardware (SIM cards).

The rapid digitalisation in India in the wake of Covid-19 has bolstered several sectors. From e-commerce and digital finance to online education and SaaS (Software as a Service). In fact, the Indian online education market is forecast to be worth S\$ 8.6 Billion by 2026. While a new collaborative report by NASSCOM in partnership with SaaSBOOMi states that India's SaaS revenue has reached \$3.5 billion as of March, 2020, growing at 30 per cent CAGR, with 75 percent of it coming from global sales.

Telemedicine/ healthTech as a sector in India too have seen a huge amount of growth. Research suggests that by 2022, the healthcare market might have a worth of \$ 370 billion, promising yields up to 35-40 percent, according to several investors. As per Traxcn data, India's investments in health tech amounted to a striking \$ 571 million in 2018.

In the Next Normal, organizations will have to adopt digital led business models to address the evolving needs of the customers and new supply chain models. Long-term strategy planning will have to be complemented with agility of execution. Enterprises will need to reimagine their strategy across customers and people and technology will be at the heart of this strategy planning and decision making. The pandemic has cemented technology's role at the heart of transformation.

Pandemic has brought to forefront new and innovative employee experience with collaborative working styles. The Future of Work will see an enhanced focus on employee wellbeing, employee engagements, more emphasis on training and reskilling in the coming year. In addition to distributed ledger, AI and Cloud, technologies such as 5G, Edge Computing, AR/VR, Nano tech and Quantum computing will see significant adoption in new products and services resulting in new business models.

We will also see an increased and concerted effort from corporates to integrate their business priorities with sustainability priorities as the startups spear ending growth.

With this digital boom, India's cyber security sector too is seeing an exponential growth. As with many other digital sectors, startups here too are driving this trend. According to Data Security Council of India's (DSCI) latest report titled Indian Cybersecurity Product Landscape 2.0—An Emerging Next-gen Cybersecurity Product Hub the number of Indian cybersecurity product startups in 2020 has grown to over 225 from over 175 in 2018, while revenue has doubled to over \$1 billion in 2020 from \$475 million in 2018.

The cyber security product industry generated a revenue of approx. USD 1016 mn in the year 2020 and grew with a CAGR of 39 percent from 2016-2020. The DSCI study shows that 84 percent of the products offered by the startups are software-based and 78 percent are offered with subscription-based licensing models to make adoption easier, especially on Indian companies. With more companies switching to cloud, 78 percent of the products have been designed for cloud while 63 percent use artificial intelligence (AI) or one of its branches for better results. Around 61 percent of the start-ups are pure-play cyber security product companies, while 28 percent offer a mix of products and services. The rest of the 11 per cent offer other technology products too.

According to the report 24 percent of the cybersecurity startups have expanded globally in the last two years and established presence in countries such as the US, Australia, Singapore and Netherlands.

"The growth in scale, sophistication, complexity, and types of attack vectors has shifted the spotlight onto business resiliency and is further pushing the demand for next-gen cybersecurity products. India is becoming a trusted and natural partner of choice for providing next-gen cybersecurity products globally," points out Rama Vedashree, CEO, DSCI.



THE YEAR 2021 TO SEE NEWER ADOPTION OF TECHNOLOGIES SUCH AS:

- 1. EVERYTHING AS SERVICES WHICH INCLUDES AI-AS-A-SERVICES AND DATA-AS-A SERVICES 5.
- 2. GPU (GRAPHICS PROCESSING UNITS) IN THE 6. CLOUD
- 3. DIGITAL TWIN COMPUTING (DTU) WILL ENABLE PREDICTIVE ANALYTICS
- 4. COGNITIVE TECHNOLOGY TO CONNECT AND CONTROL EVERYTHING TO INTEGRATE VARIOUS INTERFACES.
- QUANTUM AND EDGE COMPUTING TO USHER IN A NEW ERA OF COMPUTING
- IOT AND 5G CONNECTIVITY
- 7. DISTRIBUTED CLOUD
- 8. EMOTIONAL EXPERIENCES
- 9. ZERO CODE /NO CODE AND FINALLY
- 10. HIPAA- COMPLIANT MEETING SOFTWARE

WE HAVE GATHERED INSIGHTS FROM THE GLOBAL TECHNOLOGY LEADERS ON THEIR UNDERSTANDING TOWARDS THE TRENDING TECHNOLOGIES OF 2021. LET'S TAKE A LOOK AT THE EXPERTS' OPINION.

RIPU BAJWA

Director & General Manager, Data Protection Solutions, Dell Technologies, India

"This year has been difficult for organizations as well as individuals due to the massive disruption across all sectors. These challenging times have made us realize that digital transformation is no more an option, but a necessity, with most of the businesses transforming their operating models and opting for a remote working environment.

It is encouraging to witness businesses transforming rapidly and adopting a digital strategy which would have otherwise taken months. However, simultaneously they need to ensure data security amidst the rising cyber threats that are hovering around their data storage 24*7. As we enter the new year, organizations will not only need to manage their extensive workloads, but equally ensure that data flow is secured, without any security bug. Similarly, solution providers need to establish a channel to provide enhanced security to regulate the data traffic across multiple end points and offer the solutions as per customer' consumption needs and IT budget. Additionally, due to increased conversations around data privacy, organizations need to be extremely careful while managing the data of their customers and ensure that it's not exposed to any malicious attack or breach."

ANNA LARKINA

Senior Researcher, Kaspersky

"Nothing is truly free, and, unfortunately, the current business model for free services means that, essentially, we pay with our data. Social networks, some messengers and search engines make money off of advertising, and the more personalized it is the better. In fact, Facebook and other companies have been doing this through its services for the past few years.

The good news is that 1) Most of the companies, including Facebook, are being transparent about its policies and 2) WhatsApp doesn't read your conversations because it includes endto-end encryption. All they're tracing is technical and account information.

Moving forward, the integration between Facebook and WhatsApp will only continue to increase, and users will need to decide what level of information sharing they're comfortable with and which messaging applications they prefer. Luckily there is a variety of alternative messaging platforms and currently users can decide for themselves what works best for them."



RAVINDRA KELKAR

Area Vice President, Indian Subcontinent, Citrix

"2020 has been a ground-breaking year for technology as technology enabled people to keep on doing their work and companies to stay in business despite the pandemic. We see technology becoming even more mainstream as it becomes the driving force in enabling the new normal. Whether it is digital workspaces making work smarter or cyber actors becoming more sophisticated, technology will penetrate newer areas thereby, enhancing its capabilities.

> With remote and hybrid work models becoming the new norm, a zero-trust network is expected to replace traditional VPNs, the cloud will continue adding resilience to the IT infrastructure and employee experience will be at the centre of every decision. In 2021, it will be imperative for organizations and its leaders to facilitate agility, adaptability, flexibility and most important of all, security, to simplify the transition towards newer working environments."

SAMEER SHARMA

GM, Smart Cities and Intelligent Transportation, Intel

"2021 will be a breakout year for smart and resilient cities, infrastructure and transportation. In the short-term, we'll see a sharp increase of mid-size cities adopting smart cities technology, which will lead to the democratization of technology outside of the usual tech hubs.

Longer-term, smart cities infrastructure will be adopted in more rural areas, as consumers start to see the benefits for quality of life.

To reach this future, we'll also see a ramp up in technology investments, from the Edge (AI) to the (5G) network to the cloud. As cities continue to recover from the pandemic, technology will be a key driver in ensuring progress and adoption of new business models, leading to economic growth."

KESHAV DHAKAD

Group Head and Assistant General Counsel- Corporate, External and Legal Affairs, Microsoft India

"This year brought unprecedented change for organizations across the world and had deep implications for trust and cybersecurity. Trust in technology has perhaps never been more important. With most of the world connecting remotely, cybersecurity today is a strategic priority for every organization to protect their data, while ensuring the privacy, security and digital safety of their workforce.

Since the start of the pandemic, there's been an exponential rise in cyberattacks, targeting individuals, organizations and often critical first responders like hospitals and public health authorities. Looking ahead, cybersecurity will continue to be critical as hybrid work environments fuelled by cloud and mobility solutions become the new normal. Organizations will need to have a strong cyber resilience plan pivoted around a zero trust strategy to manage their needs across identity, security, management and compliance. This means a shift to more robust security tools and protocols, powered by cloud-based threat monitoring and analytics. As we move towards a digital economy, building trust in technology will be critical for every sector as people will only use technology that they trust. Security and privacy therefore need to be at the heart of how organizations and governments build and deliver products and services and cannot be an afterthought. No single organization can go the distance alone-we have a collective responsibility to build a tech ecosystem grounded in trust and strong ethical principles."

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CP GURNANI Managing Director & Chief Executive Officer, Tech Mahindra

"The pandemic has pushed leaders to explore alternate frameworks for sustainable growth and development in a post-COVID era. As we wait for the vaccine, I believe that the post-COVID era will be focused on innovation, scientific advancements, and the adoption of digital technologies like 5G, cloud, and data analytics. In all this, technology and connectivity will be the 'sutradhar' of India's digital future and leadership, thus fast-tracking our Bharat towards Atma Nirbharta."

LEO JOSEPH

Managing Director, Xerox India

"The pandemic inspired new ways of working and underscored the necessity of business transformation. Despite news of multiple vaccines, hybrid working will remain for the foreseeable future. For businesses, continuing to develop a technology-enabled flexible work environment that supports a hybrid working culture will be critical.

Businesses will hone in on digital solutions that support collaboration between departments, enhance productivity and help them emerge from the pandemic in a healthy and competitive position. Our global survey found 56% of businesses plan to increase their technology budgets, and 34% will accelerate digitization with investments in touchless workplace apps, digital collaboration tools, and process automation solutions.

We also expect an increased focus on addressing security concerns, particularly with the rise of cloud-based software and collaboration technology which open up potential vulnerabilities. Enhanced security measures will be a top priority in 2021. This is especially true for SMBs, which are more at risk to security breaches due to overburdened staff, smaller tech budgets and less in-house IT security expertise."

VISHAL AGRAWAL

Managing Director, Avaya India & SAARC

"Over the last several months, Covid-19 has brought rapid technological developments and transformed digital experiences significantly. The reliance on technology has surged and radical solutions have replaced the traditional tech as businesses and lifestyle are transforming rapidly. More so, there has been a complete paradigm shift across sectors due to the current outbreak of Covid-19. The trends have shifted from large scale investments to the consumerization of the technology. Going forward, we will see minimal investments in the infrastructure by the large organizations as they prepare their organizations for a hybrid workforce in this new normal. Additionally, huddle rooms and conference rooms are days of past as cloudbased collaboration and remote working solutions replace the current tech, digitally transforming the workforce and creating workplaces of the future. In the days to come, organizations will invest in infrastructure in a distributed manner to provide a similar and effective experience as enterprises pave way for flexible hybrid work model for employees. Undeniably, the customer experience and collaboration sector has evolved during these unprecedented times. This has been very well established in form of accelerated transformation of traditional contact centers into Intelligent and automated contact centers. This change was mandatory to address the digital-first customer engagement and remote work and indeed, resulted in prompt and efficient customer service. In conclusion, it can be said that the industry now has enhanced resilience, and formulated companies from varied sectors for success in the days after coronavirus."



BALAJEE SOWRIRAJAN

Managing Director, Samsung Semiconductor India R&D Center (SSIR)

"One of the biggest trends I foresee in the coming year is around building a connected and intelligent world. The emergence of devices that are not only connected but are able to take informed decisions based on data is well underway and this trend will largely be defined by four pillars -

Connectivity – The fourth industrial revolution will be built on 5G, which will be driven by convergence of digital and physical technologies such as digital connectivity, cloud and edge-computing, IoT and smart devices, AI, robotics, blockchain, and AR/VR

Sensor – While more pixels and more cameras will be enhancing the quality of our pictures, smart sensors will provide more intelligence and will enable us to choose the best shots too. Beyond image sensors, other sensors are also catching up to mimic human capabilities

Data – With big data on rise, storage solutions have evolved from core storage to a hybrid multicloud infrastructure

AI – Artificial intelligence will be critical with movement from Cloud based AI to Edge based AI, to enable real time decision making."

RENAUD DERAISON

CTO and co-founder, Tenable

"Because of the pandemic, nearly every interaction we had for weeks to months on end were virtual. We met with our therapists online, spoke to our doctors during telemedicine visits and even "walked" virtual graduation stages.

With so much of our lives happening online, the lines between security and privacy have blurred. The sheer amount of personally identifiable information (PII) and sensitive information shared, used and stored online has made our digital privacy and security never more important.

If 2020 was the practice round for cybercriminals, 2021 is going to be a professional match where bad actors will seek to compromise, steal and sell as much of this personal information as possible. Those organisations that collect and protect personal data will be prime targets, making cybersecurity an absolute imperative."

RAJIV BHALLA

Managing Director, Barco India

"2020 has been a transformative year and it has changed the way we work. A growing trend in hybrid working enabled with digital transformation was witnessed through 2020. A key learning has been that every business needs to be a digital business. Resilience, adaptability, and lifelong learning have been key skills that stood out.

The leadership structure and work culture underwent a sea change as organizations strived to limit the pandemic backlash and drive a digital and hybrid transition. Learn, unlearn, and relearn became the new superpowers as leaders tried to accelerate automation and enterprise sustainability.

Many organizations worked towards ensuring business continuity employee wellbeing and pivoted towards adapting themselves to navigate and survive through the storm. As we enter 2021, organizations will focus on talent strategies, leadership, and culture, combined with a focus on deep tech, and reskilling, will boost our resilience and stand us in good stead during future upheavals."



SONIT JAIN CEO, GaiShield Infotech

"2020 forced us through a complete revamp of enterprises' work infrastructure. From working at a minimum on-premise capacity to complete remote working, we saw various challenges with these working conditions. Enterprises rushed the work from home setup and the adoption of cloud infrastructure that increased dependence on SaaS/cloud application, opening a larger challenge in ensuring data security. Negating these challenges can be difficult by holding on to the older security approach, the impact of which we saw in the recent data breaches faced by Spotify, Big Basket etc.

This new work infrastructure demands for a more robust and purpose-built security solution with a newer approach to security, such as the Data Security Approach. It keeps data at the centre of all its initiatives, covers enterprise's SaaS/Cloud application platforms and brings the remote/WFH users under the security infrastructure to prevent intentional/unintentional, internal and external data exploitation while protecting from network threats, keeping us ready for the future."

RAMANUJAM KOMANDURI

Country Manager, India, Pure Storage

"As-a-Service consumption is now table stakes- and enterprise customers are demanding more. In 2021, it will become clear that as-a-service models have to re-justify their value every single day, because it is so easy to sign up for a service and then discontinue it in favour of a different one if it doesn't meet your needs. This means that customer service needs to formally extend beyond the point of purchase and become a more holistic customer experience. The next year will bring greater clarity around the differences between "products on subscription" (i.e. lease) offerings and true "as-a-Service" solutions, which are about buying an outcome (i.e. Service Level Agreements) and having a third-party deliver it.

Containers and Kubernetes are the one-two punch of enterprise efficiency – reinventing how we build and run applications. In 2021, look for containers and Kubernetes to remain central to enterprises launching and expanding their long-planned digital transformation projects. In fact, containers will be so mainstream that it will not be the technology that is interesting any more – but instead the new applications and digital touchpoints that CIOs will be talking about. While distributed/edge cloud architectures are still largely in the planning and testing phase, 2021 will be a foundational year for this emerging and vital cloud model – driven by the rapid expansion in 5G and IoT-connected devices, sharp increases in edge-created data sources and Kubernetes as the standard for microservices application orchestration."

ANKUR GOEL

Managing Director, Poly India & SAARC

"After a year of unprecedented change which has changed 'work' and workplace as we know it due to the COVID-19 pandemic, businesses can expect to see continued transformation well into the New Year as employees and business leaders discover new ways of working.

Employees realizing that consumer-grade gear simply cannot deliver, are demanding that home workspace be upgraded with technology that allows for seamless collaboration, whether fiber internet connectivity, noise-blocking headsets, or even audio and video conferencing solutions which allow them to join video meetings with the click of a button.

Work spaces will become collaborative and technology-enabled to accommodate the work style of every employee, and facilitate business being done from anywhere.

Video is now more common than ever for meetings, and thanks to technological advances in the past few years, have enabled collaboration on a whole new level as an increasingly critical part of business-as-usual, as organizations in industries like telemedicine and education adapt to a whole new way of doing business.

For 2021 and beyond, we'll see more businesses adopting the hybrid working model and organizations will focus on creating purposeful workspaces, being thoughtful about the design and use of different workspaces. Focusing on the reimagination of office design for innovation, collaboration, connection, and trust will be key for businesses to thrive."



RAHUL AMBEGAOKER

Senior Director and Region Head, West, NTT Ltd. in India

"Technologies like quantum and edge computing are ushering in a new era of computing and organizations can benefit from greater agility now that more computational work can be done at the edge rather than the cloud. Additionally, integrating the real and virtual worlds, digital twin computing (DTC) will enable predictive analytics.

DTC will experiment by exchanging several versions of things and people to integrate one holistic version into applications that could potentially solve daily problems like traffic congestion and disease control. Lastly, the evolution of low code/no-code platforms (Citizen Developer+ RPA) enabling just about anyone to create business applications using company data will be a significant differentiator of business in 2021."

ASHWIN YARDI

CEO, India, Capgemini

"In the Next Normal, organizations will have to adopt digital led business models to address the evolving needs of the customers and new supply chain models. Long-term strategy planning will have to be complemented with agility of execution. Enterprises will need to reimagine their strategy across customer and people and technology will be at the heart of this strategy planning and decision making. The pandemic has cemented technology's role at the heart of transformation.

Pandemic has brought to forefront new and innovative employee experience with collaborative working styles. The Future of Work will see an enhanced focus on employee wellbeing, employee engagements, more emphasis on training and reskilling in the coming year. In addition to distributed ledger, AI and Cloud, technologies such as 5G, Edge Computing, AR/VR, Nano tech and Quantum computing will see significant adoption in new products and services resulting in new business models.

We will also see an increased and concerted efforts from corporates to integrate their business priorities with sustainability priorities."

SUMAN REDDY

Managing Director, Pegasystems India

"2020 ushered in a tremendous mind shift for business leaders in terms of technology adoption. The pandemic accelerated digital transformation as it became the locus for business operations and other uncertainties. In 2021, we will see enterprises investing in artificial intelligence, cloud technologies, and intelligent automation to further safeguard business resiliency and workforce. As AI becomes more ubiquitous and autonomous, governance and empathy will also play a key role in relation to it.

With the proliferation of internet of things (IoT) devices and the increased adoption of 5G fueling this trend, computing power at the edge and the ability to leverage AI at the edge will grow too.

ModelOps will become the "go-to" approach for AI deployment. Much like the way DevOps has given structure to the way applications are deployed, ModelOps will reach a tipping point as a way for mainstream businesses to better develop and operationalize their AI models. Also, new technologies like augmented reality, virtual reality, and mixed reality will continue to advance and enhance customer experience."



SRINIVASAN CR

Chief Digital Officer, Tata Communications

"Even before the events of 2020, cloud had already established its value for many businesses by providing improved agility, scalability, and cost efficiencies across industries. The technology is helping add a layer of resilience to many organisations by making the sudden shifts in working habits less disruptive. Businesses will focus more on managing their cloud costs better and look to unify their different cloud environments. Cloud will also grow in popularity as the ideal execution venue for new and emerging technologies such as artificial intelligence (AI), machine learning (ML), blockchain, and edge computing.

This new normal will put new pressures on companies, as there will be increasing need for networks capable of supporting hybrid architectures – be it cloud, on premises, or edge computing. As a result, I predict more organisations will start seeking intelligent and intent-based networks that offer integrated security – such as SD-WAN for the WAN with SASE and Zero Trust security or virtual networks for multicloud – to deal with the increased cybersecurity threat of their new perimeter-less ecosystem. Similarly, the need to also improve customer experience (CX) will accompany the increased digitsation of businesses.

With more 5G rollouts expected in 2021, along with further growth in LP-WAN-based services, the amount of data created and handled by businesses is set to skyrocket. So, to differentiate themselves from the competition, more companies will start focusing on data analytics technology capable of securely handling information as well as analysing and deriving greater insights from their mostly unused operational data."

MANOJ PAUL Managing Director, GPX India

Thereprises who had employees accessing their servers from secured office LANs now need to allow these employees working from home using remote access connections over the unsecured internet, creating vulnerability for intrusion by unauthorized users. In this scenario, data security along with scalability and availability becomes very critical for uninterrupted operations.

So, enterprises are adopting a Hybrid Multi cloud approach to overcome the dual challenge of the digital journey - driving growth while managing risks. Companies with in-house Data Centers are shifting their infrastructure from their own office premises to third party Data Centers. Enterprises are leveraging the power of Cloud as it provides flexibility to add or reduce resources including compute and storage to match up with the ever-changing business demands. This has become even more critical in the current uncertain times. Cloud also helps when the resources are to be accessed from multiple locations. But accessing cloud over internet is a potential security risk. To address this concern, many enterprises are using the Direct Connect services to the cloud service providers (eg: AWS Direct Connect, Microsoft Express Route, Oracle FastConnect) for secured connectivity over leased lines/ MPLS which also assures a reliable and predictable performance as compared to internet.

For added reliability, enterprises are also opting for use of multiple cloud services providers so that if one cloud fails, they can leverage the other."

LT. GEN DR. SP KOCHHAR

DG, COAI

"Like any other sector, the telecom industry was also impacted by the pandemic with a sharp fall in the number of subscribers in March and April. However, business and individuals adopted digital ways, the telecom industry emerged as a saviour. Many telecom players have benefitted from a surge in the traffic of data and voice, due to which the telecom sector is performing well compared to other infrastructure sub-sectors.

As an outlook for 2021, the 5G launch is expected in the later part of the year. The technology is poised to open up a plethora of possibilities in terms of business models, better education, healthcare, smart cities, smart manufacturing, intelligent logistics, and overall, enhanced lifestyles for one and all. With the focus on AtmaNirbhar Bharat, revenue from the telecom equipment sector is expected to grow to US\$ 26.38 billion by 2020. The number of internet subscribers in the country is expected to double by 2021 to 829 million and overall IP traffic is expected to grow four-fold at a CAGR of 30% by 2021."



KT PRASAD

Managing Director and RVP, India & SAARC, Zendesk

"2020 has been a challenging year for businesses and customers alike. Earlier this year, customer experience (CX) teams across the globe had to rapidly adapt amid ticket spikes, customer cancellations, market volatility, and increased uncertainty. However, as the world moved forward, one week at a time, the global service requests eventually stabilized and new expectations and trends began to set in.

Customers now expect businesses to be more digital, accessible and empathetic. More than ever, they want and expect to connect with businesses the way they do with friends and family - effortlessly, especially over popular messaging apps like WhatsApp, Instagram or Facebook. Businesses are working on merging values from a pre-COVID era with the ever-changing demands of a post-COVID world.

Looking ahead, we anticipate that CX will continue to remain a catalyst to business success as businesses reorganise their priorities to incorporate a seamless CX journey for customers. On the other hand, digital transformation will definitely take precedence in the coming year to accommodate more omnichannel services, better IT security, agile technology and collaborative tools. Businesses will also take steps to be more people-centric, not just toward their customers, but also toward their employees. Employee experience and engagement will be a major area where we will see a change as businesses rethink their digital workplace."

SANJAY ZADOO

Country Manager, Channel Business, Vertiv India

"In 2020, India underwent a dramatic digital transformation to enable businesses to operate remot Organizations quickly started automating several critical processes and establishing new channels of communication to stay connected with their employees and ensure business continuity. Now, with companies looking at work-from-anywhere on a more long-term basis, the play of emerging technologies will become all the more crucial. The new working models will push organizations to adopt distributed cloud storage and edge computing to ensure the increased data loads are managed efficiently. Technologies like 5G, location intelligence, Artificial Intelligence (AI), Machine Learning (ML), Robotics, Industrial Automation, and Internet of Things (IoT) will gain traction to support business operations. In a customer centric market, technologies like Augmented Reality (AR), Virtual Reality (VR), and Internet of Behaviours (IoB) will play a key role to ensure that companies provide enhanced customer experiences. Additionally, Vertiv also foresees utility-like criticality of data-centers, bringing large data center capabilities to small spaces and the edge, 5G energy consumption, and a sharper focus on sustainability. Apart from ramping up their new-age technology backbone, organizations will also need to build more resilience, to ensure they are better prepared in the unfortunate event of another global crisis."

DR. AJAY DATA

Founder & CEO, VideoMeet

"The year 2020 has proven to be a boon for the IT and tech sector. With the entire world being restricted to their homes for close to 70+ days, the industries and businesses rushed to adopt this transformation, wherein they can be fully equipped to multitask on virtual meeting and conferencing platforms. E-meeting platforms like VideoMeet became the mandatory integration in every working professional's life. More so these tools also became a big aid in facilitating social gatherings, informal meetings, online classes, etc. Indian IT ecosystem is fast developing with start-ups rising and dominating a fair market share. India's growth projection has scaled from 29K start-ups in 2014, to 55K start-ups by the end of 2020. The year has also been elemental due to the Chinese applications ban, which has further created a void to be filled by Indian counterparts.

The upcoming year represents a vast number of opportunities for virtual meeting platforms, even if the vaccination begins; the convenient and cost-effective option will continue to stay as long-term practices. Sectors such as healthcare, education, corporate, government affairs are likely to utilize most of the virtual meeting applications; even the app upgrades and features will be dependent upon the needs of user base."



ANAND RAMAMOORTHY

Managing Director, Micron Technology, India

"The smartphone market has been impacted by COVID, but in 2021, we expect a rebound in smartphone unit volumes, coupled with robust average capacity growth across both DRAM and NAND solutions. 5G handset volumes could grow to approximately 500M units in 2021, from around 200M units in 2020, and these 5G products feature higher memory and storage content to enable enhanced user experience.

The data center market continues to be a growth engine for Micron, and this year COVID-19 accelerated this growth, specifically in cloud. The market is expected to start its transition to DDR5 in the second half of FY21, and networking and 5G deployments, particularly in Asia, will drive healthy DRAM bit growth quarter-over-quarter.

In 2021, Auto DRAM and NAND will continue to see robust demand autonomous vehicles and even connected cars promise more features including in-vehicle infotainment, 4K displays, AI-enabled features like gesture recognition and natural language processing, we're seeing an exponential increase in memory and compute demands. In fact, the amount of compute performance needed for cars is reaching data center levels; in advanced driver assistance / autonomous driving, cars need hundreds of tera operations per second which is some of the highest levels of performance in the industry today, rivaling what you will find in data centers and servers."

SANJAY AGRAWAL

Technology Head, Hitachi Vantara India

"The COVID-19 pandemic has changed how businesses function. Companies worldwide, more than ever have to rely on their digital infrastructure, with 'work from home' being adopted by millions. The growing dependency on the Internet of Things will continue to influence data storage patterns in 2021 when all these peripheral machines will need to increase storage.

Storage vendors are rapidly implementing artificial intelligence, machine learning and deep learning to simplify storage management. With cloud computing as the matchmaker, vendor/ partner partnerships will become equal. In 2021, the focus would be on data security, with storage services maintaining the protection of company records.

The digital advantage of Hitachi Vantara, combined with AI and research, will direct our customers from what's now to what's next. Hitachi Vantara has reiterated its focus on optimizing ROI and offering the best in class digital technology and data storage solutions."

ANKU JAIN

Managing Director, MediaTek India

"2020 has set the stage for 5G to go mainstream and in 2021, driving the next level of innovation across sectors, be it remote working, gaming, healthcare, manufacturing, video and data consumption, setting the pace for a smarter and faster-connected devices ecosystem. This will also lead to an increase in demand for next-gen 5G smartphones, newer applications and smart devices like smart TVs, tablets, phones integrated with voice interface etc.

2021 will see a bigger trend towards improved remote work capabilities with 5G SoCs taking smartphone and smart device experience to the next level. The pandemic has acted as a great catalyst expediting digitalization and faster adoption of transformative technologies like Artificial Intelligence, AIoT, Robotics and Cloud Computing, among others."

