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EXPLORE



Post-Pandemic evolution of workplaces

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Sunil Rajguru

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*Everyone's
in on it*

Can you really ban crypto?

There are a lot of people who hate cryptocurrencies, think they are a scam and want to ban them outright. Our own Indian government seems to have taken a dim view of the Bitcoin revolution. All this is easier said than done and crypto probably is here to stay.

For all its ups and downs (when doomsayers declare its death), you have to realize that on New Years Day in 2009 all the cryptocurrencies in the world were valued at zero because they didn't exist yet. From there they went to be valued at trillions of dollars, which is like a separate large country. Remember stock markets and commodities too see fluctuations, not just crypto.

Another thing is that everyone's in on it. Techies. Billionaires. Common folks. Government officials. In the last few years, millions have been investing in them. I would say we have reached a point of return thanks to them. Now crypto is not really an investment but a currency to exchange so the latter is the primary purpose. When most people realize this fact, these currencies will stabilize.

We first had barter and that concept still exists. Then gold was used, and the fascination continues. Coins and currency notes are both in circulation. The gold standard was delinked from the currencies but that didn't really affect gold sales, especially in India. Digital currencies and cryptocurrencies followed. Now they all co-exist (with their own ups and downs).

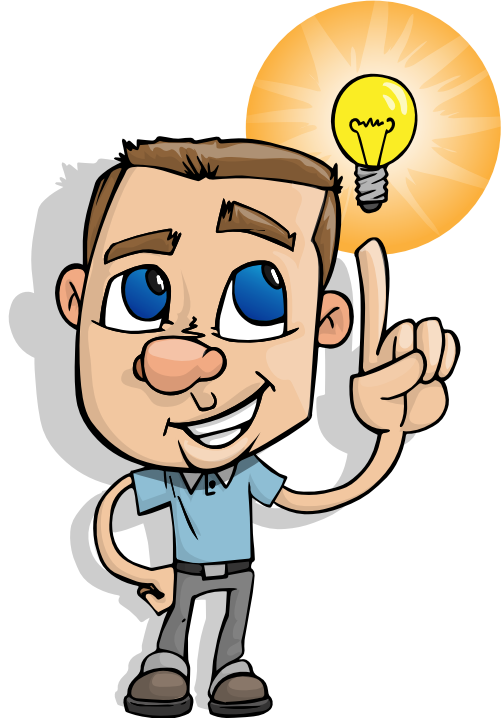
On the whole having all these means of exchanges of money is great for citizens and global commerce. It gives flexibility to the financial system. It's imperative that money keeps moving. Every innovation like ATMs, credit/debit cards and off late UPI helps the flow of money.

The problem with banning crypto is that you really can't do it. If you ban trillions of dollars overnight, they will not vanish. You will merely push it underground. It will become the delight of the Dark Web, criminals and bad characters. The circulation will continue, and for all you know, the value may actually increase. The countries that ban them may find themselves at the receiving end.

Remember the war on drugs in the US in the 1970s? What happened? Today the US is the drug capital of the world and has reached alarming proportions. The only solution is to promote everything. Barter. Gold. Coins. Notes. Digital currencies. Cryptocurrencies.

India started to join the global mainstream after the Liberalization of 1991. In the last decade or so it has made great progress recently becoming the fifth largest economy in the world. It would be a good thing if the Indian government could somehow regulate and integrate the crypto revolution withing its system.

Sunil Rajguru



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What laptop do most computer science students prefer?

■ **Sarthak Bhatia**

CSE students prefer to buy a robust, lightweight laptop equipped with the latest hardware and good battery backup. That's because the device needs to last through their 4 years course and beyond. CSE students will use their laptops to learn coding, do their assignments, make presentations, and infotainment. Nowadays, they also learn Machine learning, Deep learning, Data Science, Analytics, Game development, etc. All these require a decent GPU. So, without any doubt, you must opt for a laptop with a powerful CPU, GPU and RAM combo. Always go for the latest gen CPU and better connectivity features with a great battery backup.

A decent webcam and mic are a must-have for students as online classes are still prevalent in addition to offline classes.

I would suggest to go for a laptop like HP ENVY Laptop 13-ba1505TX. It is based on the Intel Evo platform, powered by Intel Core i7 processor, has 16 GB RAM, dedicated NVIDIA GeForce MX450 (2 GB GDDR6) graphics, and 1 TB SSD. With a powerful battery that lasts

#PCQuestTroubleShoot

through a day, this laptop features a 13.3-inch FHD (1920 x 1080) IPS touch display. The laptop costs INR 96,999.

As a data scientist, what is your laptop configuration?

■ **Deepali Aggarwal**

Data scientists need powerful machines because they have to deal with huge data sets and files that can run into MBs or even GBs. They process this data using tools like SQL, R, Python, Hadoop, LaTeX, etc. A normal laptop can't handle this kind of load. You should go for a laptop with the latest generation CPU (the 12th gen is the latest from Intel), either from Intel or AMD. An Intel Core i7 or higher is recommended. Go for at least 16 GB RAM, and upgrade to 32 GB as the data sets become heavier. A GPU is a must for a Data scientist, so something like a GeForce 10 or Quadro from Nvidia or higher is recommended. Go for at least 1 TB SSD for storage. If you're looking for some good machines, then check out the HP ZBook series of laptops. You'll find a device with specs that are suitable for you.

Why do people use wireless keyboards with their laptops instead of the built-in keyboard?

■ **Manan Pahuja**

While using the laptop's keyboard, many people face postural issues, and adding an external keyboard helps them sit properly and adjust the keyboard as per their liking and comfort. I am also using an external keyboard, which is a wireless Mouse and Keyboard combo so that I can work as per my comfort.

Post-Pandemic evolution of workplaces

Ashok Pandey
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Covid-19 has taught all of us that work can be managed from anywhere. Business continuity at the time of the first lockdown was of prime importance. Today, we have a more distributed and location-agnostic workforce. We have witnessed that this modern and geographically dispersed workforce desires flexibility and tools to work from wherever they want

The Covid-19 pandemic has upended the world in a multitude of ways and changed the way we work. As the virus is influencing the economy, the question arises what would be its impact on commercial leasing and co-working spaces? Anticipating businesses being resilient, co-working spaces are expected to emerge stronger in the post-Covid world. The flexibility and well-crafted strategies to promote a preventive and safe and healthy co-working environment are attracting many businesses.

While work from home may co-exist, office space will not lose its importance as the benefits of working in a physical office space, both in terms of cohesion as well as productivity, is long-lasting. Given that corporate occupiers want to reduce costs, even the most conventional occupiers are now seeing merit in co-working. These spaces, with their natural flexibility and inherent readiness to add value, are best positioned to adapt and redefine the future of the workspace.

Coworking spaces have become very popular post-pandemic. There have been two drivers – one is a set of companies that wanted to lease out their own space as co-working spaces as they were locked and another set of companies that capitalized on the same without having to pay huge capex. This has gained traction and employers are also viewing this as a great opportunity to cut down on travel time for their employees as well. With the world going hybrid and the importance of in-person meetings still being very real – the co-working space concept is a great boon. But then, there are quite a few questions like “Is privacy a concern as employees from the competition can be co-located”? While cybersecurity takes care of the data privacy needs to a large extent, the latent human aspect still is a major



REETU RAINA, Vice President and Global Head of Talent Management, Amdocs

play. Will coworking spaces become the norm going forward or is it a blip – only time will tell.

Companies cutting across the industry are working frantically to offer work from anywhere opportunities to their employees and the emphasis is on promoting flexibility



HARSHVENDRA SOIN, Global Chief People Officer & Head - Marketing, Tech Mahindra



The concept of a new normal workspace is being reimagined as a hub of innovation and social interaction. Adhering to these, organisations are setting up recreation zones, break-out spaces, a space to collaborate by design, and flex-spaces. Hence companies are defining their unique purpose-driven hybrid model, which is based on flexibility, well-being, and inclusion, as they gear up return to office strategies.



We have worked on improving ‘at home’ experiences along with ‘at work’ experiences. In a hybrid work environment, what matters is the outcomes instead of the output, so, Performance Management has become more about enablement rather than measurement.

and safe interactions in the coworking model by maintaining healthy social distance among people and offering clean and hygienic workspaces.

Several studies have suggested that more developers of commercial office assets across the country are expected to align with coworking operators and carve out specialized spaces for them. Covid-19 has in many ways emerged as the chief designer of office spaces of the future. Many offices have resumed on-site operations and come back to normalcy, albeit in a new normal – the hybrid model.

According to a report from CyberMedia Research, “Most of the companies (72%) made their decisions regarding office space right after the 1st wave of Covid-19. Only 9% were looking to increase the office space post the 2nd wave of Covid-19.”

Technology will continue to shape coworking spaces. Smart buildings enable coworking spaces to optimize energy usage and employ environmentally friendly techniques. IoT technology can assist in boosting operational efficiency by solving problems in realtime without human intervention. Flexible workspaces add to the work-life balance while providing companies with the benefit of a diverse community and reduced rental costs. The co-working sector has turned the pandemic crisis into an opportunity.

Now, the situation seems to have become much better. Even more, businesses are drawn to the flexibility of a fully managed, safe, and healthy co-working environment. Many businesses are embracing a hybrid working model that can be set up from anywhere in the world, and with a distributed workforce, coworking spaces offer employees the feeling of an office. Advanced HR technology ensures work is not affected due to geographical separation. In short, an immersive workspace is no longer restricted to conventional office spaces, and coworking spaces offer an attractive proposition for a global workforce.



HARPREET HUDA, Human Resources Manager, Petpooja



The pandemic has made companies realize that traditional office spaces can turn out to be a real liability. As happened amid the two waves of the pandemic, most office spaces were lying vacant due to work-from-home arrangements and nationwide lockdowns. Companies have learned that satellite offices are far better and more feasible than opening offices.

We witnessed three major changes, even as the post-Covid reset is already happening in the broader commercial/workspaces real-estate –

- Small co-working spaces/ conversion of residential or equivalent places into co-working hostels, with residential cum shared workspaces, good internet connections, and arrangements for food (and drinks). These places are an information security nightmare – public Wi-Fis, confidential conversations in open spaces, constantly breaking down VPN connections, and so on.
- Metro/urban co-working spaces became more flexible – 1-day passes, and short-term rentals, for instance.
- Rentals came down: Coworking became more affordable than finding a full office, even as companies contemplated a “return to office”.

Remote working or WFH did not necessarily mean the death of offices but certainly, hybrid models in which people have greater autonomy to choose when to come to the office and when to work, remotely coupled with a percentage of the workforce working completely remotely were going to become more and more ubiquitous. ■

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Hybrid working models: The challenges and developments

Ashok Pandey

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Virtual team management did pose a few challenges in terms of communication, productivity, and accountability. However, with the right set of tools, like TeamChat, Video Conferencing, and Easy document sharing and editing, these remote-work scenarios can be tackled with

The advantages of working from home have received a lot of attention in recent years, but some drawbacks need to be discussed. Telecommuting has, after all, changed how many people think about work and how they do it, and any change of this kind will come with problems that need to be solved and obstacles that need to be overcome.

Covid-19 has transformed everything around us and accelerated our journey into an inevitable future, agnostic of distance and time. With remote work, the boundaries between work and life have blurred. Traditional working hours are no longer 'normal.' Work calls are extending late into the evenings often disrupting precious personal and family time.

However, in virtual environments, it is a huge challenge for the teams to effectively come together and also learn from each other. Also, the attention span can be limited when remote, and employers have tried to mandate video calls to mitigate the same – still, long discussions happen which can be effectively solved in a fraction of this time when in person. The bigger challenge is when half of the workforce is virtual. Effectively managing the same while not disadvantaging the teams that are remote is a huge challenge.

Now that there is a constant war for talent, companies have the chance to offer remote work to their employees and become leaders in their field.

But employers and HR leaders have a hard time finding a good balance between the pros and cons of working from home.

From the employees' and the company's point of view, these are some of the challenges –

1. Resources and Technologies for the Remote Workforce: In an office setting, it is simple to manage software access, allowing you to ensure that all employees have access to the tools they need to perform their jobs. Some employees may not have access to the appropriate software from anywhere, or they aren't secure enough resulting in issues, which can arise when managing remote work/teams.

2. Employees Struggling with Social Isolation: For instance, the inability to converse or socialize over a cup of coffee;

Remote work appears to be the best option for an employee in the post-pandemic era because it offers so many advantages, including avoiding a daily long commute, not having to relocate for better career prospects, having more flexibility to manage personal needs, pursuing career growth opportunities, and even achieving work-life balance.

– **DAYA PRAKASH**, Co-Founder, TalentOnLease

the lack of timely collaboration, teamwork, and employee engagement activities that are good for employees' overall development and motivation.

3. Employees' mental health and work-life balance: Work-life balance is one of the greatest challenges of remote work, and it can have repercussions for employers. The problems here could be overworking, where employees spend too much time working or thinking about work, but they could also be underworking, especially if there are distractions at home. Gartner discovered that in the United States, work-life balance is more important to employees than health benefits.

4. Productivity of Employees: Although research suggests that remote workers typically have high productivity, this may not be true for all of them. A significant challenge for employers is ensuring that employees maintain the same levels of productivity they typically attain in the office while working remotely.

5. Career Development: In addition to having a solid understanding of the employee's primary field of work, leadership positions place distinct demands on interpersonal skills.

6. Information and communication security: A team of employees using their own devices to remotely access your network exposes your company to a variety of security risks, including phishing and other forms of social engineering, as well as viruses,

malware, and ransomware. Therefore, it must be a top priority to reduce any associated risk to a minimum.

These are some of the challenges that

employers must be facing while managing remote teams. But it's not the end, let's have a look at what our leaders have to say about the challenges faced by them –



HARESH AWATRAMANI, CEO, Beehive

The challenges may differ from one company to the next depending on team structure and company culture. However, there are several issues that employers face when the team remains remote or in hybrid mode. When you have all your employees in one place, it results in better communication and achieving deliverables. But how do you know what remote workers are doing and whether they are doing non-work-related tasks during work hours? This boils down to a lack of insight into employee activity, which revolves around a few key factors: trust, productivity tracking, security, and device monitoring.

AMIT DAS, Co-founder and CEO of Think360.ai

Onboarding them, helping them understand the workplace relationships, offering the right help at the right time (or at all times). HR organizations embody the ethos of an organization. And workplace empathy is not really easy in a remote or virtual environment.

The bigger investments will be in a new form of learning management and performance management systems. Remote environments risk being too transactional (sprints, pushes, go-lives, SLAs) – we need to watch out for the human side of HR.



ZAIBA SARANG, Co-founder, iThink Logistics

Multiple challenges are tackled within the purview of the employer and HR point of view. One of the primary tasks is to ensure all team members are motivated and give their best every day. When the team members are working remotely after a point, they need to feel valued from time to time. Cross-functional interaction is also reduced in the virtual world, and HR has to make sure to conduct the interaction session online. The team trusts that everyone is working with the same discipline and dedication that they had in the office. It becomes a little difficult for new members to mix up with existing members, but we have ice-breaking sessions in which we make it fun and memorable.

SHEFALI SHARMA GARG, Vice President – People Strategy, Publicis Sapient

The pandemic prompted organizations to reconsider how they operate, particularly considering the complexity and rise of new technologies in recent years - adopting and attempting to adapt to virtual functions. The People function team has always played the most critical and enabling role. When leading teams in a virtual workplace, today's leader must both learn and unlearn the techniques they previously employed.





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**SMITI BHATT DEORAH, Co-Founder & COO, Advantage Club**

The number of virtual workplaces is growing. People request to work from home more frequently than ever, and firms realize the fantastic advantages of doing so too. On the contrary, It is impossible to deny that leading virtual teams also presents some difficulties. Abrupt changes are prone to teething problems, and managing virtual teams is no exception. Some significant challenges HR and employers face in managing virtual teams included but were not limited to different communication styles, lack of structure, lack of suitable tools, digital illiteracy, feelings of distrust, distracting environments, slow response times, and lack of appreciation, culture and socialization.

DR. MILIND R. AGARWAL, Founder & CEO Quickwork

Prominent challenges that the Human Resource Department of organisations are witnessing post- Covid-19 is the inability of the workforce to handle emotional and social stress which have multiplied in the wake of the completely changed business environment. The issues related to flexibility, resilience, and adaptability for employees are also critical and must be handled with great care and empathy by companies to keep their growth and profitability intact.

**SAMEER L KANODIA, Managing Director and CEO of Lumina Datamatics Limited**

Collaboration and engagement happen naturally when employees trust their managers and believe they're working toward a shared vision. But it is not easy in an environment where face-to-face interaction is rare. Low productivity is an apparent risk when employees work outside a traditional office. With that said, there are certain finite elements that can't be reproduced online or remotely. For instance, in-person training encourages people to ask more questions in a safe environment providing more room for interpersonal growth.

ANSHUMAN DAS, CEO & Co-founder, Careernet

Also, the hybrid work mode throws a bit of a challenge in terms of the unpredictability and planning of the in-office work schedule. Since work from home was a norm for a long time, organisations haven't mandated in-office days for employees yet. So managers find it difficult to organise meetings and get the entire team to attend them in person. Employees are also finding it challenging to fully understand the situation at work. Poor engagement and irregular communication have contributed to early attrition as well.





ZAHARA KANCHWALLA, Co-Founder & CEO, Rite KnowledgeLabs

While some employees thrive in a virtual, remote environment, some have clearly led to the erosion of trust. Instances of moonlighting, employees not logging on to calls on time and a lackadaisical attitude towards work while being remote has led to organizations feeling the need to monitor remote employees closely. And monitoring is not seen by employees in a positive light. It is seen as a lack of trust to do their work, intruding on their sense of freedom at work and their accountability to their manager and organisation as a whole. Building and maintaining trust is a key challenge for both employees as well as employers in the virtual environment.

MARTHESH NAGENDRA, Country Manager - India, ME & SAARC, NETGEAR

A lot has happened in the last few months due to Covid 19 which has made the collaboration between HR and technology even more significant, helping employees to tackle a range of issues associated with remote and hybrid working, mental health emergencies, and changing employee expectations and requirements. However the biggest challenge for HR leaders working within the technology sector undoubtedly was how to attract and then retain the talent they needed.

In today's fast-paced, constantly evolving world, keeping the teams inspired is no easy feat. But companies that succeed in these areas will have a massive advantage over those that don't.

Some of the employees have gotten so used to WFH that it is difficult to get them back into offices. WFH, also means that we are effectively reliant on the work progress reported by employees as against the company measuring it directly. Learning effectively in groups is very much hampered in a virtual environment as you don't work collaboratively on emerging ideas.



▼ Developments HR tech to tackle current challenges

HR tech has taken the front seat in the last two years. Automation has taken over the entire HR process by storm – interviews have become remote with AI assist; onboarding has become virtual and even IDs have gone digital. Even assets are delivered at the residence! The processes related to employee engagement and appraisals are also completely automated. Finally, the exit processes are also completely automated. Apart from this, L&D has gone completely virtual, and more and more learning platforms have gained popularity.

The Coronavirus pandemic has brought attention to the need for technology to support the resilience and readiness of organizations. Every aspect of business has

been influenced by Covid-19, putting HR teams and departments at the forefront and bringing about permanent improvements to the leadership, policies, processes and employee experience.

Many moved to ERP (Enterprise Resource Planning), cloud-based solutions, tech platforms for recruitment and talent management, compensation and benefits management etc. Where it was already present, organizations are now heavily investing in HR tech additionally, even for basic HR operations like onboarding, communication, self-service, engagement, and benefits, to name a few.

All three types of workplaces, physical, virtual, and hybrid, are expected to co-exist. In this new ecosystem, HR technology will

play a crucial role in balancing the different expectations of employees. The increased use of HR tech will enable employees to perform less repetitive, manual labour and simplify work while boosting productivity, removing “friction” from procedures and job activities. It will also leave much time for more significant, insight-oriented, higher-impact tasks.

- The increased and advanced usage of human resources technology has decidedly improved talent attraction, employees’ experience, and helped to effectively scale operations. AI and ML emerged as a star in HR technology trends to help with workforce analytics and employee support.
- Hybrid work remains the leading model for many companies. And, blockchain is facilitating with the urgent need to develop a platform that’ll secure the inner data

Companies invested in a lot of technologies during this period to ensure seamless operations. For instance, digital recruitment and onboarding software to make sure that the hiring processes and candidate experience are smooth. In fact, activities like employee orientation were also held through video conferencing.

Rules of engagement regarding tracking and monitoring of work, and those around communication have seen enough developments. With fewer opportunities for spontaneous in-person interactions in the workplace, HR managers have been more deliberate in establishing and developing relationships with their team members which have been critical in shaping the employee experience and connection to the organizations.

While many HR and technology teams have implemented robotic process automation and basic chatbots, the next step will be to redesign work to incorporate analytics and machine learning that can truly improve the flow of work and empower the roles of humans. Focus on employees’ mental health needs to be worked upon as well, since in a remote/hybrid set up, the water-cooler conversations and tight bonds with colleagues are reduced.

The term “e-HR” describes the

transformation of HR service delivery using web-based technology. Now HR professionals must not only master traditional HR skills and knowledge but also have the ability to apply that knowledge via technology.

Today the face of HR is often a portal, rather than a person. Almost all companies now provide universal access to HR services through technology and web-based applications, dramatically changing the practice of human resource management. These changes often result from the need to cut costs and expand or improve services. Recent research shows organizations that successfully adopt sophisticated HR technology tools outperform those that do not.

Instead, organizations must determine how to use technology to transform their HR practices and market their HR brand. HR is evolving into a more technology-based profession because organizations need to:

- Streamline HR processes and reduce administrative burdens.
- Reduce HR administration and compliance costs.
- Compete more effectively for global talent.
- Improve service and access to data for employees.
- Provide real-time metrics to allow decision-makers to spot trends and manage the workforce more effectively.
- Enable HR to transform so it can play a more strategic role in the business.

In the coming days, new technologies that deliver data-driven insights and enable recruiting teams to identify geographical markets with the best sources of talent for certain jobs will be in greater demand. Such technologies will ideally allow talent acquisition staff to search for candidates in different markets, using several criteria including diversity, salaries, cost of living, skills, and experience, as well as what competitive companies are nearby. This information arms HR teams with the insights they need to better plan where to hire and how to support remote workers.

Technology can enable HR teams to be effective and accessible but ultimately, we need to keep the human touch in Human Resource. ■



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The must-have technologies to be future ready

Ashok Pandey

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Technology adoption has rapidly increased across the nation, and most businesses are inclined to invest heavily in digital business transformation. Each day, better, faster, and more precise technology replaces the previous generation

The pandemic has driven the digitization agenda of the organisation and forced us to rethink about the future of work. Companies are using Artificial Intelligence, Machine Learning, and predictive analytics in a growing range of contexts. Robotics and other semi-autonomous machines are taking on tasks that were long believed to be executable only by humans. Repetitive tasks are being automated and allowing employees to focus on high-value work. Finally, advances in materials and biological sciences, such as nano-technologies and bioengineering, are rendering robots more human-like and are changing the way humans function, the future is bionic. Many of these technologies have been used in some form for decades but are now gaining prominence.

Along with AI, ML, and all other leading technologies, firms need to adopt technology platforms that support asynchronous

communication. Future operating models will have a significantly large proportion of people working in a distributed manner (time zone, location, flexible timings). Asynchronous communication will need to be learned and adapted more by firms to make the future of work a success. During the pandemic, most firms went virtual but took the same modes of working that were successful in the physically co-located world, to the online world. We have seen that multiple online meetings can cause significant fatigue. Hence, it becomes important for us to learn and implement asynchronous communication in our day-to-day work.

The future will be shaped by developments in areas of technology such as AI, ML, automation, and data analytics. Companies that make investments in new technologies have the potential to use those technologies as a force multiplier and derive enormous benefits from those investments. However,



SHAILESH SINGLA, Country Head & Senior Director, HCM Cloud, Oracle India



The future of work is extremely focused on remote and hybrid working models and hence the must-have technology largely aligns with the requirements of these work models. Technology has gradually taken over all business processes and has become an integral part of how businesses operate; HR processes are no exception. Emerging technologies such as AI, ML, cloud, and data analytics are among the must-haves in HR technology. Mobile phone adoption, new advanced technology solutions, and increased broadband and Internet speeds have all benefited the HR sector over the last two decades and will continue to do in the years to come.

Some recent innovations we see in the HR sphere with respect to this are cloud-based HR tech solutions integrated with sophisticated technologies. AI/ML and data analytics-enabled solutions that provide a holistic view of all employee processes on a single solution are among the technological innovations expected to gain prominence in the future of work. Similarly, in the HR space, technologies and solutions that encourage data-driven decision-making for both employees and employers are emerging as strong enablers. These technologies aid in providing unbiased recommendations for critical employee growth decisions such as skill enhancement, making better decisions, personalising employee experiences, and leveraging highly configurable workflows that provide scalability and localization, among other things.

these companies will need to retrain their workforce to concentrate on value-added activities. Mobile workforce enablement, i.e. “Any App, Any Device, and from Anywhere” and “security” are two must-have technologies that enterprises must deploy to be ready for future work. The ability of businesses to use cutting-edge technologies like automation, AI, and ML as well as cloud adoption to increase the effectiveness of their use of business intelligence (BI) and analytics as a force multiplier is one of the key factors in their efforts to set themselves apart from their competitors.

As per a survey by Deloitte, organizations are adopting intelligent automation solutions to benefit from increased productivity, cost reduction, improved accuracy, and better customer experience. Along with technical potential, companies also need to consider the following elements in their quest to be future-ready:

- The cost of developing and deploying both hardware and software for automation
- The supply-and-demand dynamics of labor – if workers with sufficient skills for the given occupation are in abundant supply and significantly less expensive than automation, this could slow the rate of adoption
- The benefits of automation beyond labor

substitution—including higher levels of output, better quality, fewer errors, and capabilities that surpass human ability

Looking at the current scenario from the past two years Unified Communications (Voice, Video and Messaging) has become an inevitable technology for the future. The tech ensures disaster recovery and is a readily available communication channels for enterprises for internal and external customers. Artificial intelligence is perhaps the parent of all intelligent technology features. An enabler for AI is the creation and analysis of all data. Particularly in “conversational AI,” which has an impact on our surroundings, lifestyles, jobs, and leisure activities, IoT, data, and computing technologies have allowed AI to advance significantly.

Some examples of current demands

- 1) Sitecore with .NET development
- 2) NodeJS, JavaScript & RestJS
- 3) Oracle Weblogic, SOA admin, Cloud provisioning and maintenance (AWS/GCP or Azure), Unix and shell scripting, and working knowledge of database servers.

The must-have technologies for future of work are:

- **Connectivity** – Wi-Fi and 4G or upcoming 5G connectivity is a must. A Reliable connection is a key to keep employees in the zone.



TARUN SINHA, CEO, Enterprise Business, BetterPlace



The way of work for frontline workers has always been, in a sense, hybrid. Because of the sheer volume of the workforce, one HR manager had to manage a vast network of workforce spread across geographies. With the rising shift towards gig workers, the geographical expanse has gotten wider. In such circumstances, the must-have technology to be future-ready is a robust HR-tech platform. Robust HR-tech platforms have three major benefits which are crucial to control the greatest cost for any enterprise: the cost of churn. Robust platforms help enterprises increase employee engagement, increase employee productivity, and as a result, reduce operational costs.



- **Collaboration** – Collaborative environments to support the hybrid way of working. We need to ensure Email is just not about sending and receiving emails but it's truly an Email and Collaboration solution where you can communicate effectively, work collaboratively real-time, co-edit documents, and beyond.
- **Remote communication tools** – Quality remote communication tools help us communicate when face-to-face options are just not available. These tools can also be used to help widen your client base geographically and save money long term.
- **Video messaging on email** – Small, byte-sized personalized video message on email is the next-gen personalization that will reinvent a whole new aspect of personalizing your emails to connect with your prospects and/or clients.
- **Internet of Things (IoT)** - The IoT Technologies, devices like smart thermostats extend the lifespan of expensive HVAC equipment by optimizing system use, and the cost savings of smart energy management can be reinvested elsewhere. Moreover, as further knowledge and insights are gained by smart device providers about how office spaces best use IoT devices, the technology will continue to evolve to make office environments more comfortable and productive.
- **Storage** – Cloud-based storage makes it easy to share files and workloads between team members.
- **Blockchain** – The technology can potentially be employed in a wider variety of financial activities in the future, enabling the secure execution of new digital transactions and documents. The strength of blockchain stems from its accessibility, as opposed to the “lock box” technique of financial protection.
- **Automation** – Automation of operations, aided by technology like robotics and AI, offers increased productivity, efficiency, safety, and convenience. It has also increased work prospects across specialized roles; as a result, professionals and learners must upskill themselves by acquiring skills and information.
- **AI-based tools** – These tools will increase the propensity to achieve goals in the future that may have not been as obvious or easy to achieve today.
- **Cybersecurity** – No matter what changes are evolved in the technological field, there will always be a need for robust, effective cybersecurity. In today's scenario, most companies store so much data online, that investing in strong security and keeping it updated is important. ■

Effective virtual collaboration in the workplace

Ashok Pandey

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We all need to acknowledge the fact that the hybrid mode of working is not going to go away. We must acknowledge the presence and relevance of hybrid work for the long haul

The meeting rooms that we all built in our respective offices in 2019 and before, most of them were designed for different kinds of video collaborations, not the cloud-based collaborations we are using today. The pandemic changed things, now, the good news is you don't have to break those rooms, you can make some subtle changes to ensure that those rooms adapt themselves to the new tools that are being deployed today. You don't have to break the bank, you don't have to break the room, there are solutions available. **Anand Lakshmanan, Head of Video Collaborations, India and Southwest Asia, Logitech**, discussed collaboration challenges, trends, and tech that can enhance our meeting experience.

▼ The challenges and tech enhancement/developments

One of the first challenges that all of the organisations faced when the pandemic hit us was people carried out work wherever they went be it their home, hometowns, etc. So the IT teams had the responsibility of ensuring business continuity, business could not shut down because of the pandemic, which means reliance on technology was not going to come down, on the contrary, it was only increasing. So the IT teams had a massive responsibility of making sure that people use technology but from wherever they were to ensure business continuity ultimately which means overnight, not just hundreds but billions of them had to be provided tools that they would use to continue delivering their responsibilities from wherever they were.

Collaboration was one of the key concerns, thanks to the products like Logitech that don't require any software, you just plug the product to a laptop or a room solution and technology is so advanced that the handshake happens automatically, there's no configuration or big deal of installation at least from a work from a home level that people are required to do. So this is the number one point that helps in scaling billions of workers and get them onboard with these remote tools.

For instance, we have a product called



ANAND LAKSHMANAN, Head of Video Collaborations, India and Southwest Asia, Logitech

Rally Bar so people today want everything in one solution, a speaker, microphone, and a camera all put into a single solution because as we all know and realise these were the very same rooms that we were using in 2019 and are going back to those same rooms after two-and-a-half years which means there's no big scope for us to do remediation in those rooms. Logitech, therefore, came up with solutions that can straightaway fit into these pre-existing rooms to help people get on with a new way of collaboration which is to use the cloud collaboration tools with good endpoints for better audio and visual connectivity and a seamless collaboration experience.

Secondly, thanks to Zoom, Google, and Microsoft who also made the collaboration platform available on the cloud, we were all used to working in an office set up where there were servers and there was a server room and most of the software we were using was hosted there. This meant that the moment we stepped outside our offices there would be connectivity issues but these players solved that puzzle and challenge by making collaborations tools available on the cloud which means you can connect from anywhere.

▼ Video collaboration technology trends

In our experience with speaking to CIOs, globally CIOs are facing the key challenge of making technology simple as they are tackling those challenges the expectations have also increased. Some of them would be for instance artificial intelligence, CIOs are looking for making decisions based on data, let me give you a real-life example we have multiple meeting rooms in our respective offices, let's say our offices want to consolidate real estate and do away with the large offices because the world is not going to come back to what it was in 2019 anytime soon. We will never have 100% attendance in any of our offices, that said how should anyone decide how many meeting rooms their new office should have? Let's say we have 50 rooms in our old office, and we will not create the same number of rooms again. How do people get data in terms of how many meetings happened in these 50 rooms and how many of those were video meetings? Even in terms of maintaining Covid protocols, how does somebody determine if a 3-seater meeting room only has 3 people or 4 people? This is where CIOs are expecting AI to come and help them and the good news is, we at Logitech have products and solutions that have this intelligence built-in we have cameras that identify how many people are sitting in a room and if the camera is configured to send an alert if the room capacity is breached. So the first trend we

are witnessing is the integration of AI.

Talking about the second trend, in India as a country we are still adopting the video-first culture, as we have all been in the pandemic the last two years, we have gotten used to much more than what it was. This culture is just picking up thanks to the telecoms who are making sure that good broadband is available in most parts of the country. People are getting used to facing the camera, seeing each other face to face even though it is remote, and then having those audio only meetings getting converted to video so the concept of video collaboration itself is just about picking up. CIOs again want to ensure that technology stays simple and easy so that more people adopt it.

Third, we are seeing more and more people adopting cloud and anything hosted on the cloud, primarily because one of the things the pandemic did to almost all businesses without exception is it dispersed the workforce. Today we have people distributed across the length and breadth of the country but contributing to a common outcome, I think this trend is going to continue for some more time which means that more and more people will adopt those remote tools and collaborate more and more to deliver a common outcome which means things have to be cloud-friendly, this is again what Logitech is focusing on.

A few years ago it would have been almost impossible for us to have a video meeting



without a good broadband connection but today it is almost practical for you to do a high-definition video conference using your mobile broadband. That is how much technology has improved and this again becomes an expectation in the CIOs mind.

Lastly, when people start adopting more video solutions and more endpoints, manageability comes into the picture. While CIOs want to use technology and want to make it available to people and keep it simple, the IT teams want to ensure that managing this video estate is easily possible. Logitech is helping organisations achieve the same, we have ourselves hosted on the cloud management platform for our customers to use, and currently, we don't even charge them for this, where they can create an account, login, and use their credentials they will be able to first get visibility into their organisation's VC estate and later on they will be able to administer and manage it.

▼ How can video collaboration overcome the meeting equity gap?

A simple concept of meeting equity in Logitech's definition is nothing but everybody who's in a meeting feeling equal in terms of their participation, it's something as simple as that. However, though the concept is simple, ensuring that it happens, unfortunately, is not that simple but the good news is some tools and technologies are available for people that are looking to establish meeting equity in their respective organisations, these tools come to their rescue.

Let me explain this with an example of our current meeting, assuming that we had let a few of our customers participate in this meeting and if they were logging in from the comfort of their homes and this meeting was all about coming up with ideas to enhance meeting equity, we would use a whiteboard to brainstorm ideas. This was now not possible as we had remote participants who are rendered unable to brainstorm effectively and not contribute in real-time. This was one challenge that Logitech addressed during the pandemic, so we came up with a solution which is an exclusive whiteboard camera called Logitech Scribe which captures

just the contents of the whiteboard which means you can keep everything that you already have in the room as is and use the whiteboard as an add on solution to the room and it captures the contents of the whiteboard and makes it available to everyone in the meeting whether they are sitting with us or participating remotely giving every participant a front row view of the whiteboard. This is the first step toward making people feel that they have a say in the meeting.

Secondly, the ability to be seen and heard well which is very crucial. People actually don't give a lot of importance to video, especially organisations that are in the process of adopting video collaboration. People generally think an audio meeting is sufficient for collaboration. The pandemic has made us believe otherwise.

▼ Transform utilising the legacy tech

The moment we acknowledge that hybrid work is here to stay, organisations that have invested in legacy systems over the pandemic do not need to retire them immediately. There are software licences available today that makes it easy for organisations to use their legacy systems along with the new age collaboration tools. For example, Teams, Meet, and Zoom for all of these there are licences available that will help you get on to these collaboration platforms without changing your primary unit. With the addition of licences, organisations can retain their systems and operations. The experience will not be as great as that of the new age systems but that's the trade-off.

Lastly, I'd like to talk about remote management tools, these are very important since participants are spread across which makes life for IT teams difficult. This is where remote management tools come to the rescue, we spoke about Logitech's own solution called Logi SYNC. We provide the licence to this software free of cost for most of our customers, and a lot of insights come out of these solutions. This software can be used by IT teams to make informed decisions. Our advice to everyone who has invested in legacy systems is, don't worry, your investment is safe. ■

Future skills to upgrade your career

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In the world of digitalization, some skills like cloud computing, Artificial Intelligence, Machine Learning, and DevOps are future ready skills. During the lockdown, multiple digital courses were launched around key areas. Travel restrictions also meant that employees saved a lot of time and that was spent on up-skilling programs

We are witnessing some exciting times with lots of techs and digital innovations across the globe. Disruption is evident across various sectors and industries. Keeping in mind the double impact of the pandemic's economic impact and accelerated automation rate, almost half of us will have to reskill in the next five years. But the very technical disruption that is transforming the jobs will also help us to learn new skills too.

The skills required are rapidly evolving. The ever-changing dynamics across sectors necessitate a workforce inclined toward continuous learning and engagement. Technology-driven businesses make digital skills essential for any professional to thrive. This includes not just a basic understanding of tools, technologies, and platforms but also an adept knowledge of technology trends that may have a significant influence on their industries.

A lot of skills today are very narrow and there are some which can get very obsolete very soon because of the fast-changing technology landscape, changing ways of working, etc. Low code no code and AI will soon take over many skills that we use today. Therefore, in such changing environments, we must make sure that people are future ready. There should be a greater focus on broader skills such as problem-solving, finding solutions innovatively, dealing with abstraction, understanding new problems

faster, and how people become capable of adjusting to existing demands.

The pandemic proved to be a game changer for everyone across the globe. It shifted us from a monotonous work routine to a more flexible option of a hybrid working model. With the changing work dynamic, professionals must possess skill sets that can prepare them for challenging times.

In the past two and half years, the adoption of advanced technologies grew manifold. The possession of technical understanding and skill sets has become a necessary criterion. Candidates who possess technical abilities such as implementing futuristic technologies such as AI, ML, blockchain, IoT, Big Data, and programming languages like Java, Python, etc. stand an advantage to secure a desired job. There is an increase in demand for professionals who understand the technology space and are constantly upgrading their technical skill sets to match the ever-evolving world. Good knowledge of SMAC (social, mobile, analytics, and cloud) is also the need of the hour.

The future of work is hybrid and businesses need to adapt to a phygital way of life that combines the best of the digital and physical worlds, regardless of the industry that they belong to.

In today's global world where phygital has become the way of life, design and consumer experience will play a big role. Organisations will increasingly focus on:



ANSHUMAN DAS,
CEO & Co-founder, Careernet



To succeed in this hybrid environment, professionals need self-discipline and the drive to equip themselves with the necessary soft skills and tech skills. Examples of some tech skills that will be in demand include superlative coding, analytics, AI, blockchain, platform engineering, and UI & UX design. A lot of these new technologies will soon become mainstream, blending seamlessly across industries.

For instance, cryptocurrency is making finance borderless and e-commerce is blending digital and physical retail. New age technology is rapidly disrupting traditional industries such as oil and gas, transportation, healthcare, and manufacturing. Applying a global perspective to everything that we do is key to catalysing the growth of businesses and professionals alike.

- Building businesses for a data-driven economy
- Reinventing user experience for global users
- Scaling their services
- Understanding how the internet can impact their business

Technology has become intertwined with nearly every aspect of our lives. Even activities that didn't seem to require a digital component have benefitted from its application. Restaurants are taking customer orders on a touchscreen tablet, algorithms are determining the value of homes, and social media suggests people you may know and want to reconnect with.

The pandemic has increased the adoption of and the need for more digital products, services, experiences, and conveniences. For a

person who is in technology domain, the below skill-sets are must –

- Programming and software development
- AI and ML
- Data analytics and visualization
- Cloud computing
- Information Security

Even for users of technology, some of the above skill sets are now becoming a necessity. For example, a lot of restaurant owners have realized the value of data analytics and visualization nowadays.

A report published by CyberMedia Research shows that post the second wave of Covid-19 more employees (67%) are looking forward to enhance their skills. They have shown interest in accessing online learning paths provided by companies to enhance their skills at their own pace. Let's see what our industry experts think about it –



MAHESH ZURALE, senior managing director, lead - Advanced Technology Centers in India, Accenture

Companies are adopting digital technologies to reinvent their business. As a result, there is a need for technologists who understand specific industries, factors impacting business such as customer experience transformation, as well as enterprise functions like finance and supply chain. Enterprise reinvention requires companies to build a strong digital core, which is driving need for people with cloud, data, AI and security skills. Similarly, enterprises are now looking at leveraging the metaverse and Web3 to accelerate their digital initiatives, thus creating the demand for deep tech skills in areas such as AI and blockchain as well as skilled professionals in the experience layer including 3D and concept designers and human

computer interaction experts.

The emergence of this trend will require industry and solution experts who can bring these together for real-world applications. Beyond specialized technology and industry skills, there will be an increased focus on creative thinking, critical reasoning, and soft skills that are important to help solve real-world problems. As sustainability becomes a key priority for businesses, niche skills such as green coding are also expected to become much sought-after.

SHEFALI SHARMA GARG, Vice President - People Strategy, Publicis Sapient

It is essential to ensure employee happiness and satisfaction as we prepare for the future. To adapt to the ever-changing environment, it is imperative that every employee enhance their performance and, at times, acquire entirely new skills.

Reinvention, strengthening one's identity, optimizing speed, embracing change, and adapting swiftly are some of the most valued and highly regarded skills. Flexible, scalable, and innovative teams are the future of a robust digital transformation ecosystem, based on technological considerations.





DAYA PRAKASH, Co-Founder, TalentOnLease

The use of technology has permeated almost every aspect of our lives. Its use has benefited even tasks that didn't initially appear to need a digital component. Algorithms are used to calculate home values, restaurants use touchscreen tablets to take customer orders, and social media suggests potential connections you might want to make. Future software will be even more integral to our lives, taking on daily responsibilities (driving a car), enhancing our skills (finding the next career skill to learn), and generally improving our quality of life (tailoring diets or exercise regimens). The demand for tech expertise will rise as the world moves more quickly in this direction, and employment in tech-related fields will continue to increase in lockstep

with that growth. The pandemic has increased the demand for more digital products, services, experiences, and conveniences, as well as increased adoption of these things. The pandemic has increased the speed and scope of digital transformation. For the workforce to be future-ready, one must have experience with new-age technologies, including AI/ML, AR/VR, IoT, Robotics, cloud computing, data analytics, and data visualization, to name just a few.

ESHA GULATI, Regional Human Resources Lead - Asia, ZS India

Along with the core technical skills, emotional intelligence is a key skill that will determine the success of people in a hybrid workplace. Being empathetic helps people to build deep relationships and establish trust, which are key success drivers for teams to thrive in a fast-paced and intense environment. Also, given technology is advancing very fast, learning agility and having a growth mindset will be key a differentiator leading to people's success.

Vidhu Nautiyal, Co-Founder and Chief Revenue Officer, CloudConnect Communications Pvt. Ltd

You'll probably be working in a position by the year 2030, that doesn't exist at the moment. But because the workplace is changing so quickly, you'll need to figure out how to get ready for a future employment role that is impossible to anticipate. Some of the skills that will make you future-ready are: Cognitive flexibility, digital literacy and computational thinking, judgement and decision-making, and emotional and social intelligence.



AMITT SHARMA, Founder and CEO, VDO.AI

Technological intelligence has emerged as a necessity for professionals across domains. We are living in a digital-first world, and understanding its role, versions, and impact on different industries has become imperative to explore new job roles and eventually land one that intrigues you and gives you a sense of purpose. Apart from this, some of the most evergreen sought-after skills that professionals must acquire to thrive in any job include communication, empathy, leadership, team management, adaptability, and constant learning abilities. These skills will help you evolve with the changing business landscape and thrive in whatever you do.

MAY YANG, Managing Director, Synechron

Many corporates and industry bodies have put various reskilling and upskilling programs in place for employees and professionals to develop skills that can help them operate efficiently. However, this is all happening at a very advanced stage. We need skill development programs at a high school and college level as well. By introducing courses and updating the current curricula to focus more strongly on technology and knowledge-widening areas, the government can further strengthen the working force of the country.

**A R RAMESH, Director - Managed Services & Professional, Adecco India**

In today's context, individual skills do not make as much sense as they used to a couple of years ago. The requirements today are for an individual with at least 2 - 3 skills, if not more! Hence having one skill is really not an asset anymore. Also, with the rate at which digital progress is happening and new tools and concepts emerging, what is relevant today may not be so in the next three months. However, broad categories of skills that fall under the cloud, cybersecurity, Data related skills, AI & ML, and UI/UX are in demand. Tool sets related to no-code, low-code/microservices and containers, DevOps, etc. also are in demand.

CHAYAN MUKHOPADHYAY, Co-Founder, and CEO of Qandle

In the future, the most valuable and in-demand work will be cognitive in nature. Employees will have to apply creativity, critical thinking, technological intelligence, and constant digital upskilling to solve complex problems. The digital economy demands new ideas, information, and business models that continually expand, combine and shift into new areas of expertise. Knowledge workers must therefore consistently update their digital dexterity to stay relevant. HR departments simultaneously will have to promote a continuous learning environment, knowledge-driven talent acquisition, and retention, and transparency across the organization to be future ready.

**ZAHARA KANCHWALLA, Co-Founder & CEO, Rite KnowledgeLabs**

The ability to identify, understand and use data will be critical. This is what data literacy is all about and it will be a critical skill in the future. Additionally, the one key skill required to be future-ready is an "always learning" mindset - be it digital skills or data literacy, the ability to be in tune with changing times needs on to stay ahead of the learning curve always.

To be future ready in this increasingly connected, the fast-paced and well-informed world will mean having the ability

to understand as well as accommodate the ever-evolving demands and needs of the demographic. Technology intelligence

requirements have gone way beyond knowing a few jargons. Not just technical, but emotional and cultural intelligence will have equal importance in the “Required Skill Set” list for the future. The ability to quickly shift focus and train of thought from one concept or system to another; execute with passion and enthusiasm; as well as being intuitive to come up with innovative ideas will be crucial abilities.

50% of all employees will need reskilling by 2025, as the adoption of technology increases, according to the World Economic Forum’s Future of Jobs Report. Clearly, the skills of the future will be centered around data. As more and more businesses and business functions go digital, data will permeate every aspect of work.

Some of the most successful re-skilling initiatives focused on Personalized Skills Development. Building online training programs and career portals are two upskilling and reskilling tactics that even small companies employed during the pandemic to ensure their workforces are prepared for the future. Most initiatives focused on collaborations with online education platforms to offer employees online learning opportunities. It included personalized learning experiences in a career portal that helps employees plan their future and identify skills they need to learn.

Some organizations also opted for initiatives that were connected to their ‘Learning Platform’ which was essentially a blend of classroom and digital learning opportunities with content from internal and external subject matter experts. This way, employees controlled their own learning and career development, and workers in any position at any size company would benefit from autonomous learning opportunities.

Another successful reskilling program was focused on mentoring employees for a digitized workplace in the future. In a two-phase program, employees can attend classes and receive on-the-job training in



DR. MILIND R. AGARWAL,
Founder & CEO, Quickwork



Some of the critical areas where reskilling of the existing workforce is a must include the cognitive and digital capabilities of the organisation. The Human Resource Department of the organisations should also put emphasis on enhancing the emotional and social skills of the employees which are required to enhance their overall resilience and adaptability to successfully overcome the emerging challenges on the business front.

preparation for work. Upon completion, they can be poised to earn more money and secure better career opportunities. By learning on the job, employees could learn the practical applications of new skills.

According to a 2018 World Economic Forum report on the future of jobs, 133 million new jobs will be created by emerging technologies by 2022, while 75 million existing jobs will be lost across 20 major economies. Workers are being pushed to upskill to meet the demands of the industrial revolution. As technology becomes more prominent, job roles will change, and the workforce will need to undergo training to remain relevant when the need arises. Any organization that makes use of technology has made re-skilling or up-skilling its workforce one of its top priorities. The only way to reinvent how we work, learn, and interact with one another and contribute to the development of our country is to enhance human brilliance with robust technology. Future workplaces will benefit from a workforce that possesses the necessary resources, tools, and skills in addition to being highly adaptable and versatile. ■

The Evolution of The Modern Workspaces

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With an increase in flexible working, employees now have the freedom to work from anywhere. Technology and social interactions have already changed our work life and work roles. As the workforce is evolving, the future looks fascinating that would consist collaborative spaces mixed with virtual offices

Over the years, workplace characteristics have changed drastically. The pandemic pushed us to sit at one place, and today technology started to prevail and influence the way we work. The workplace of the present looks completely different from what it was just a few decades ago—or even a few years ago. With the rise of collaboration and the continuing evolution, it's fascinating to think about all the transformations that have happened and the future. We spoke to **Ankur Goel, Managing Director, Poly India & SAARC**, to understand the evolution of the workspaces and strategies to implement the hybrid work environment.

▼ Evolution of work and workspaces

Undoubtedly, we have seen a massive shift in the way we work over the last two years. In the initial days of the pandemic, organisations were forced to move to a work-from-home setup. Were organisations ready for it? The answer is no.

However, as we progressed and employers and employees started getting a bit more accustomed to remote working, companies started realising that we can be productive, no matter our work location, provided we have the right tools and technologies. Today, the location and the devices from which we work have become irrelevant, and work is no longer a place we go to, but it is what we do.

I definitely believe that hybrid working is the future. The physical office is not going to go away anytime soon, especially for sectors like manufacturing and banking, but it will take on a new form. At the same time, remote working will also continue in some form as companies have realised the benefits of working remotely, like better work-life balance for employees and lesser operational costs for employers.

I have spoken to many CIOs over the last few months and even analysed many recent industry reports, and in my view, there is no doubt that hybrid working is the future. If companies are serious about retaining and attracting the best talent, they need to take hybrid working seriously; CIOs should start looking at 3 Rs—Redesign, Refresh, and Redeploy their workplace technologies to



ANKUR GOEL, Managing Director, Poly India & SAARC

serve the hybrid workforce.

▼ The strategies to keep in mind while implementing hybrid work

One of the biggest things companies need to keep in mind while implementing hybrid work is to provide the same and consistent work experience to all employees – regardless of their work location. Whether employees are working from home, at the office, or anywhere on the go, they have to have a good work experience.

For remote workers, one of the biggest challenges is background noise and distractions. For example, when an employee is working remotely, their spouse may also be working from home, children may be running around in the background, and then they have to deal with the other household noises like the mixer grinder sounds or the dog barking in the background. So, they are prone to many distractions. It is important that organisations equip these workers with the right audio and video technologies and other collaboration tools so that they can have an office kind of experience at home. They also should have the IT support that they require while they are working from home.

For office workers, CIOs should look at how they can utilise their office space more effectively and think about how they can

make each and every corner of their office spaces more productive and user-friendly for employees—they should build more huddle rooms and have smaller focus rooms so that teams can have more impromptu brainstorming and catch-up sessions.

Organisations should bear in mind that in a hybrid work setup, there is no one size that fits all, and they need to ensure that they match different workstyles and employee behaviours to the right collaboration technologies to power successful hybrid workspaces.

▼ The right collaboration technology

Each employee has specific technology needs to excel in their role, whether at home or in the office.

Understanding their preferences for how and where they plan to work helps promote employee confidence and engagement and puts people on an equal footing no matter where they're located—Poly calls these workspace personas.

Poly has been researching workspace personas for more than a decade, and our research shows that 92% of employees in an enterprise can be categorized into six different workstyles.

Each of these workers has unique needs that range from their preferred style of communication to the locations they want to work from. Therefore, equipping them with the right collaboration tools for where and how they work is critical for maximizing their productivity. By understanding the workstyle personas, companies can use the insights as building blocks to create a technology strategy that meets the needs of every employee.

Poly has been perfecting collaboration technology for more than 60 years. We have the best-in-class solutions to work from anywhere. Whether employees are in the office, on the go, at home – or a combination of all three, Poly's solutions promote meeting equality.

Tips for companies implementing the hybrid work strategy

Some of the tips include-

- **Invest in solutions that offer a**



fantastic user experience. Video and audio conferencing have now gone mainstream. Investing in these collaboration devices, which have features like embedded Artificial Intelligence (AI), and Machine Learning (ML) included in them, provides an amazing end-user experience. At Poly, we are applying advancements in AI, machine learning, and new technologies to deliver the best camera angles, which consistently provide superior audio quality, no matter the calling platform used.

- **Choose solutions that are platform agnostic and provide investment protection.** No matter which UC platform an organization chooses for its internal communications, many customers will find that users likely need to connect to several different platforms due to the needs of a client, partner, or prospect. As a result, one cloud platform for communication and collaboration purposes no longer suffice.

Customers should keep in mind to invest in solutions that support a multi-cloud environment and purchase an audio and visual technology provider that works equally well with any platform.

- **Go for vendors that offer a complete portfolio of solutions where services play a big role.** Choose a vendor that provides a full range of portfolio of collaboration solutions (be it for a remote worker or a large conference room) that offers rich monitoring and insight capabilities so that they can keep a pulse on device status, meeting performance and end-user experience. ■

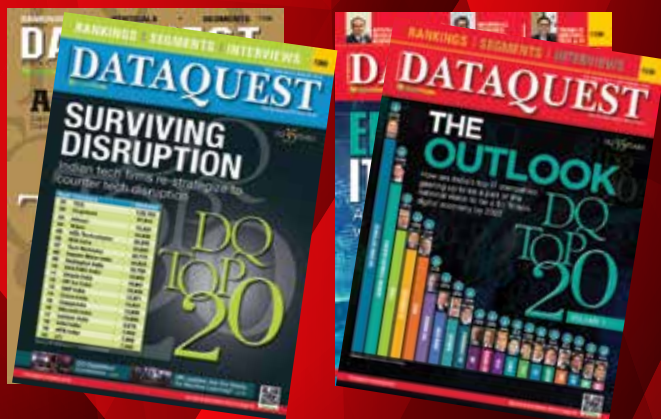
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Tips to secure employees working from anywhere

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As organizations are adopting hybrid working models, it becomes difficult for them to ensure data security. It becomes important for remote workers to secure their networks while working with confidential information. Here are some steps organizations can take to protect their business and secure their remote workforce

Technological improvement makes it easy to work virtually, enabling employees to have a healthy work-life balance. The percentage of full-time employees working from home due to Covid-19 closures jumped to 61% from 33%, according to Gallup. Since then, there has been a significant jump in cybersecurity-related threats across sectors. For securing the data infrastructure of the company which has come under increased threat perception owing to remote work, organisations need to be very vigilant about the overall safety and security of credentials of their software data networks.

Ensuring every employee is aware that data security is a top concern is the first step in protecting firm data. Unfortunately, some employees today may still be unaware of the importance of data security in both their personal and professional lives. A cybersecurity policy should be established as an excellent place to start. Whether they work remotely, all new and existing workers must read and sign the policy.

Additionally, the most frequent way to put your business at risk of a data security breach is by using an unprotected Wi-Fi network. Everyone is aware that remote workers occasionally need to leave their homes. The last thing you want to do is restrict workers from going to their favourite

places of inspiration and motivation to work. In this instance, remote employees need to be instructed on safeguarding the company's data. To require employees to use a virtual private network is the simplest solution (VPN). Before connecting to public Wi-Fi networks, remote workers should use VPNs to encrypt their Internet data.

Organizations can conduct a cybersecurity posture assessment which would provide an overall view of the organization's internal and external security posture, i.e. from hacker chatter to application security. No matter where work is being done, employees need to know how files should be accessed and where they need to be saved. Additionally, company files should never be saved on personal devices. This ensures that all files will be backed up regularly and can be restored if needed.

In order to avoid and minimize risk, one can follow simple steps/tips to keep the remote workforce protected.

- Establish and enforce a data security policy.
- Equip your employees with the right tools and technology.
- Make VPN Access mandatory for each employee and don't overload your VPN.
- Frequently update your network security systems and regularly perform



PRAMOD SHARDA, CEO, IceWarp



Working remotely does increase the possibility of being susceptible to a few more cyber-security threats than usual. The importance, therefore, of deploying secure technology for your businesses and employees increases significantly in the current scenarios. Relying on two-factor authentication and using encrypted software is certainly advisable to protect your business and employees' data. Also, establishing a strong cybersecurity policy is key to protecting company data.

password audit

- Require employees to use strong and varied passwords.
- Regulate the use of personal devices.
- Security protection software (Anti-Virus, Malware, Phishing email protection, etc)
- Encrypt all Laptops including disk encryption,
- Institute a “Zero Trust” approach.
- Make sure all Internet connections are secure.
- Multi-factor authentication (MFA) for mobile devices.
- Implement reputable software and upgrade them to the latest patches.
- Router/modems password secured and firewall feature enabled.
- Monitor employees’ remote work practices.
- Train your employees well and supply

them with robust IT support.

- Mandatory backups.
- MDM/EMM solutions.

Taking these precautionary measures can help organizations safeguard their businesses and confidential information against potential cyber threats. They can invest in – infrastructure, health, and people and wellness. With remote and hybrid workplaces on the rise, IT teams will have to modernize and equip themselves better.

In addition, HR professionals must have complete trust in their HRIS solution to protect and maintain an accurate record of their employees’ data. Since HR is entrusted with the most sensitive personally identifiable information, employees must understand how the tool works, where the data resides, who has access to it, how to build security profiles, and identify vulnerabilities if any. ■



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How AI & ML are bridging the gap between ideas and reality

Ajay Kumar

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Turning from fiction to reality, the global AI market is valued at \$136.6 billion in 2022 which is projected to rise by over \$1.81 trillion (almost 13x) by 2030. Deployed into a variety of sectors such as finance, health care, gaming, national security, and transportation, there are numerous examples where AI is already creating an impact in the world and enhancing human competencies in significant ways

Joining hands with technology is an advanced revolution witnessed by the world that has up-scaled the living standards and business operations unimaginably. Specifically emphasizing on Artificial Intelligence (AI) and Machine Learning (ML), these two collaborative intelligences have invaded almost every sector while simulating human behavior, and capabilities to think, and response accordingly. Having said that, AI and ML is radically altering the manual work- denoting significant advancements in work process.

▼ Best Examples Of Industries Driving AI & ML Into Operations While Turning Ideas Into Reality

Recent decade has proven the efficiency of artificial intelligence- indeed AI is shaking up the business operations! With potential impact on future, AI & ML is advocating in present as well with exemplary success in numerous sectors. Have a deeper insight into 4 top-notch industries driving artificial intelligence showcasing the extent of technology's applications.

▼ Enhanced Healthcare Services

Advancement in clinical efficiency, diagnosis accuracy, and customer support are some noteworthy results of the usage of AI & ML application in healthcare sector. Needless to say, technology and applications have encouraged healthier behaviour in individuals while aiding them with proactive management of healthy lifestyle. Approximately, 38% of medical providers utilize AI for diagnosis. Herein, AI is already being utilized in detecting potentially life-threatening episodes more accurately than in early or treatable stage. Nonetheless, denoting the extraordinary improvements in the healthcare industry, AI and ML has created a remarkable impact on people with its potential to save lives- that was almost impossible to predict and treat without its application.

▼ Automated Transportation

Collaboration of AI and ML is working like a magic to automate "driving" transportation sector. For say, Tesla is a pioneer name in the advanced electric vehicle market- designed to be upgraded to self-driving in future. Use of AI through data sensors in such cars picks up the information such as driver's hand placement on the wheel and how the driver operates other functions. AI in Transportation



AJAY KUMAR, CEO & Co-Founder,
Appventurez

market is expected to grow to a whopping 3.5 billion USD by 2023, achieving a CAGR up to 14.5%. Indeed an exemplary example of how AI and ML are utilized to provide consumers with unimaginable, quick and, safe driving capabilities.

▼ Personalized Digital Media and Streaming Platforms

Digital/Internet marketing has taken a massive turn already- only expected to grow in assistance with AI. Accustomed to AI technology, now marketers are spotting micro trends and leveraging AI to extend automated digital marketing services. As a result, AI and ML play a crucial role in enhancing the social media user experience and streaming platforms. Typically, these platforms use AI to scour the consumer's likes and then highlight the most relevant content for the social media and online streaming user. In fact, using AI and ML accelerates content searchability and eliminates inappropriate content as per saved data. Showcasing such limitless innovations, AI and ML is the proven amalgamation technology that bridges the gap between ideas and reality.

▼ Digital Assistance Or Digitised Personal

Alexa and Siri are today's generation digital assistance without which we can't imagine our lives. Easing daily tasks, such digitized assistants offers multitude of features to streamline few of the daily tasks- whether it's a personal reminder or a complex work task. Further improvements are also made in the digital assistance such as advanced voice recognition, conversational interactions, and understanding your customer preferences. Forecasts suggest, by 2024 the number of digital assistance will reach to 8.4 billion units. ■

The author is CEO & Co-Founder, Appventurez

Ways Cloud Computing is shaping the future of the healthcare sector

Karunya Sampath

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The digital evolution in the healthcare industry is transforming through the cloud. Digitally transformed healthcare organizations are modernizing their operations that will lead to a better future

In general, wars are known to accelerate technological advancements across sectors. New tools are created and new experiments are done with a sense of urgency in a widespread manner for military purposes and later they evolve into standards and tools applicable for the needs of the general public.

War on COVID, in a way, created a similar ripple effect worldwide, catapulted several sectors, especially healthcare, years into the future, and led to the faster adoption of digital technologies. It is no secret that the cloud and the scale it operates on are the core foundational elements that make the delivery of these digital technologies feasible.

In short, Cloud offers Scale & Agility packed together which, otherwise, are opposing forces in nature. Different deployment models of cloud (Public, Private and Hybrid / Multi Cloud) and the variety of service offerings they come up with (i.e, Cloud based Analytics / AI / ML, Cloud-native applications, cloud storage, streaming, virtual desktops, automatic scaling) cater to the needs of creative applications of software for problem-solving and pave the way for advancing healthcare.

▼ **Faster responses to future crises**

The ability to spin-up and run applications in an elastic manner, or apply machine learning & analytical algorithms on volumes of data in a scalable way enables quicker response for any future pandemics. We've witnessed it during the initial days of the recent pandemic.

Moderna, one of the first drug makers to produce a COVID-19 vaccine (mRNA), has built a technology platform to quickly and safely deliver the drugs. The platform behaves like "an operating system" (host) to spin up new "apps" (drugs) which can be analyzed, simulated, tested, and delivered simultaneously. This platform has been built by using a broad range of services by a popular cloud platform.

Though Moderna had been initially working on a "test" using the platform to demonstrate how quickly they could develop a vaccine for a future virus in the event of a pandemic, soon they faced a real-world challenge and had to act swiftly and develop a vaccine to save



KARUNYA SAMPATH, Co-Founder & CEO,
Payoda

millions of lives.

Using the apps & machine learning built on Cloud, the team designed a vaccine in just two days, and within 42 days the first vaccine was ready to undergo the clinical trials, which would otherwise take 20 months to develop.

▼ **Enabler of Innovation - At scale**

Cloud-native applications and cloud AI/ML offerings help us build innovative solutions rapidly and test them in the real market soon. Cloud will continue to be the bedrock of innovative ideas in healthcare.

One of the intriguing healthcare startups we work with, is a holistic care provider for special needs children affected by Autism, ADHD and other developmental delays.

The startup built and tested a minimum viable product on top of a cloud AI service, which would analyze the child's actions and facial emotions in real time to provide quick insights, so that the progress of the therapy can be recorded and tracked.

With the agility that the cloud offers, more such ideas will come to life in different aspects of healthcare such as diagnosis, research, visualization, training and telemedicine.

▼ **Backbone of Mixed Reality**

Mixed reality technologies need to produce new environments and visualizations for the immersive experience, and cloud will serve as the processing and rendering backend of



the MR devices since they usually have less computational power.

Our internal Hackathon seven years ago saw an amusing yet thought-provoking prototype for Augmented Reality. It combined AI and AR technologies and put them into use on Fetal Ultrasound Scan images and offered the user a simulated 3D view of what the baby would look like, when the ultrasound scan image is viewed through the camera.

With the new range of XR devices emerging, interesting applications such as visualizing scan images or viewing internal anatomy during a surgical procedure, or applying AI on live stream of the skin or body surface viewed through the XR device for diagnosis could soon be a reality.

▼ Improved Patient Care & Engagement

Telemedicine will further evolve and we'd see newer use cases of remote patient monitoring and patient engagement experiences. Casual "video visits" will become prevalent.

A software and wearables company developed a highly-secure continuous monitoring solution for diabetic patients who are at high risk of lower limb amputations by designing a connected boot (wearable IoT) to reduce the rate of limb amputations.

Cloud and IoT analytics coupled with increased use of wearables will become part of regular patient monitoring routine resulting in quicker decision making and proactive care. Continuous patient monitoring is critical

for enabling timely medical interventions, reducing readmission rates, and improving health outcomes.

▼ Healthcare interoperability (Health APIs & Data Engines)

Cloud based, unified healthcare data storage platforms and protocols for interoperability among them will begin to emerge. These new age healthcare data storage platforms will allow the individuals to own and control the single version of truth for their health data which they could decide to share with providers as necessary.

In order to adopt a 'composable' nature, new age health platforms will start offering Health APIs & Data exchange APIs that can be seamlessly integrated into other systems enabling the creation of a data universe and unified patient views while still being secured, private and compliant with the regulatory frameworks.

▼ Role of Edge Clouds & Distributed Clouds

In the data ecosystem created by connected devices, edge computing and hybrid clouds will become an essential part of it. Edge computing brings the computation and storage physically close to where data is being generated and used.

With its ability to deliver real time analysis of big data, edge clouds will become a critical enabling technology in multiple healthcare scenarios. ■

The author is Co-Founder & CEO, Payoda

Voice&Data August edition talks about the India has created its own 4G /5G stack. and analysis on the recently concluded 5G Spectrum Auction.

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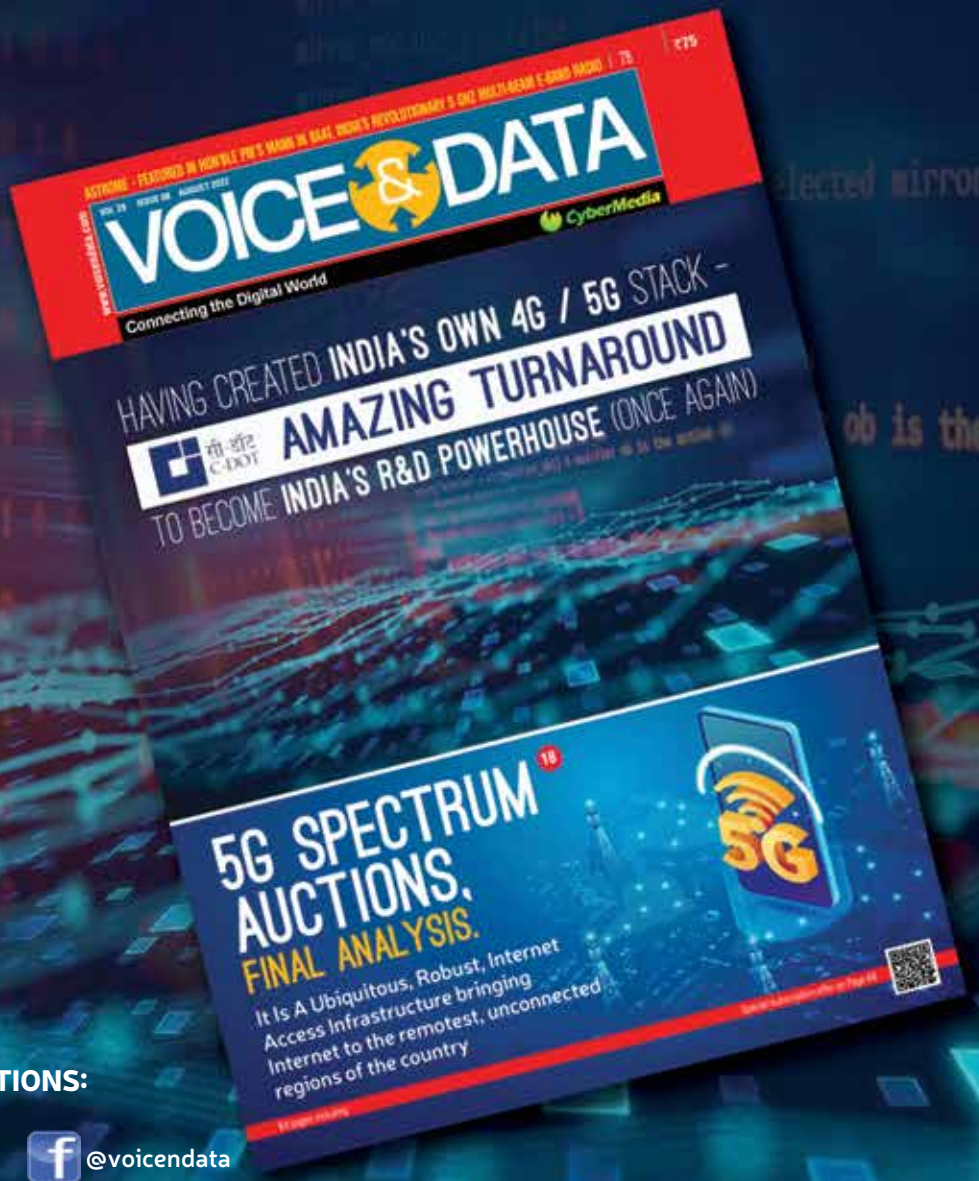
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Cybersecurity Challenges With E-Sports or Online Gaming

Anuradha Choudhary

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E-sports have taken the world by storm and growing rapidly, it's inevitable that attackers will look to capitalize on vulnerabilities at every stage of the workflow. Online gaming leaves players and online games vulnerable to attacks. Cybercriminals are undoubtedly paying attention to the esports market and they're looking to make a quick buck by modding games, stealing valuable intellectual property and ripping tournament streams

The gaming industry has exploded rapidly in the recent years and it is not only limited to a specific age-group audience and users, but individuals belonging to every age group. Such a rapid growth has been noticed since the pandemic times when boredom let every person indulge themselves in something new, particularly in gaming and technology sector.

However, too much of anything is dangerous and this includes the gaming industry. Current statistics predict that e-sports has the viability to generate as close as \$200 billion in revenue by the end of this year. Going by the ThreatMetrix Gaming and Gambling Cybercrime Report, approximately 5% of accounts created at gaming sites are linked to fraudster.

The unprecedented growth is also somewhat in relation to cybersecurity threats which most gamers intend to ignore. Let's go back down the memory lane when in 2021, the maker of the popular video game cyberpunk 2077 was hacked in a Ransomware attack. To all the quests, it later turned out that certain information was leaked which was discovered and saved via data miners.

The landscape of threat is only expanding for online gamers. Below are a few examples of some common security threats.

- **Trojan Malware:** Known as computer viruses in simple terms, this malware can affect someone having an internet connection and willing to download a rogue attachment whilst playing a game via any unprotected site. He/she is likely to get trapped within a cybercriminal network.

- **Ransomware:** As mentioned above, this broadly consists of an infected system that has the capacity to console gamers playing e-sports. The information processed can easily be stolen and retrieved once the ransom is paid by the victim directly to the attacker.

- **Spyware:** Without any knowledge, gamers can easily be targeted, especially if they are on the go to deal with an untrustworthy gaming operation. Generally, spyware monitors have an innate ability to monitor the user's information every now and then. Once the information is collected,

it can easily be sold to a third-party audience which will be breached privacy.

- **Phishing with stolen identities:**

This is an ultimate go-to method for most cybercriminals with innovative tactics for the gaming industry specifically. The message which is ought to go out from a malicious individual may also mimic the user who is trusted and may be encountered online.

Considering the boom in online gaming and e-sport industry in the recent times, the risks and security challenges have also increased tremendously. It has become imperative to impart high quality Cybersecurity training in colleges and universities at a broad level. There is an urgent need to upscale cybersecurity training in order to improve the skillsets of cybersecurity professionals, keeping in mind the growing demand of the industry.

Cyber threats could be quite menacing and can also cause distress among company leaders and government officials. In the world of gaming, vulnerable youngsters get exposed to dangerous cyberattacks. It is advisable that gamers should not put down their gaming pad into intense fear as it can be handled and mitigated like a pro.

Here are a few ways in which one can stay secure.

- Making use of a VPN can help, as it is an ideal tool to mask sensitive information thereby obscuring one's IP address, digital device number, history, and more.

- An updated antivirus software can also come handy to protect user's action. This is a great way to ensure protection against ransom, spyware, infected files, and more.

- Spreading the liable and genuine information to genuine sites is a must.

Wrapping up, one of the most essential aspects is to not trust the public Wi-Fi and fall for scams related to the same. Gaming at times requires online payments, for which it is indispensable that you must secure your sensitive information while accessing details like bank accounts or other cellular networks conducted to encrypt. Above all, let us not forget that it's high time to tackle cyber threats with the apt knowledge, mindset and training. ■

The author is CEO, Think Cyber India

Gamification is the new effective tool for EdTech companies

Suresh Rao

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EdTech has been improving the education, it has shown contrasting results when it came to teaching and learning. Now many Educational institutions are adopting gamification techniques across the world to enhance participation levels among students that is offering a wide range of benefits over traditional rote learning approaches

The pandemic has led to large-scale changes in life as we knew it. From a business standpoint, it has made the world aware of the need to digitize. And no other industry has been revamped more than the education industry. With the emergence of E-learning platforms and resources, classrooms have shifted to virtual spaces. As a result, edtech companies are constantly looking for technologies and tools that can make the experience of teaching and learning more efficient, personalized, and effective. One such tool is gamification.

▼ What is gamification?

Gamification, as a concept, is based on the reinforcement model of learning. It allows students to engage with the course material and ensures that learning proceeds through an easy-to-understand point-based system. The underlying principle is that the learners should feel actively involved in a game-based learning activity so that knowledge acquisition does not feel cumbersome. They are awarded points and rewards to encourage teamwork and cooperation. Since learning is more experiential, students can grasp concepts quickly and retain them longer. Thus, it urges them to go beyond the traditional rote learning method and not rely solely on the lecture mode of teaching.

▼ How is gamification changing the face of E-learning and Edtech?

The increased use of technologies like AI, ML, Big Data, and IoT has made the industry more open and accepting of gamification. It is based on making education and learning more accessible and immersing. It allows one to reflect and reformulate learning material and create personal meaning. It also simplifies dense theoretical concepts into practical ideas so that students gain hands-on experience. Furthermore, the employment of AR and VR technologies enables the creation of a learning environment based on the stimulation of multisensory modalities. This ensures effective and faster learning.

The students can set realistic goals for themselves through point-based systems and get rewarded for achieving them. In addition, they can keep track of their progress and the progress made by their peers. This encourages them to learn from each other and motivates them to



SURESH RAO,
Founding Member
and Executive
Director, Imarticus
Learning

better their score.

▼ How does gamification bridge the gap between learning and implementation?

Edtech platforms have entered all fields, including STEM (Science, Technology, Engineering, Mathematics), and the need of the hour is to innovate the way these subjects are taught. Gamification allows the subject matter to be delivered in a way that emphasizes real-world application, helping students adopt a practical and realistic approach. The game-based approach entails a pedagogical shift from the lecturer-student mode to applying knowledge to solve real-life problems. This helps the students enhance their acumen, skill set, and employability.

▼ What does the future of gamification look like?

The future and success of Edtech companies depend upon their ability to innovate, experiment, and adapt, and gamification has emerged as an integral component of this. In addition, it has spurred the education industry to reflect on its methods and challenge the assumptions on which these are based. Learning no longer has to be tiresome and boring.

Gamification allows for holistic development, encourages a practical approach to the subject matter, fosters healthy competition, and ensures effective engagement and retaining theoretical concepts. It enables self-paced learning and learning through interaction with trainers and peers. Students can keep track of their progress and gain a realistic view of the improvements by comparing points. Areas of deficits can be identified and worked upon. The future thus looks bright for Gamification and Edtech companies that employ it. ■

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Rising uncertainties necessitate that India should accelerate toward precision agriculture

Amith Agarwal

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The rapid adoption of advanced technologies can drive the change when farmers will utilise scientific data and technology to improve crop yields

The highlights of the first half of this year would include several adverse weather patterns in India. Temperatures soared as early as March, and India soon experienced its hottest summer in 122 years. However, a dry and hot March meant an adverse impact on the summer crops and wheat harvest. Consequently, wheat production dropped by 3.8 million tonnes this year. Again, recent developments suggest 293 of 703 districts in the country have experienced less than average monsoon, with 57 districts facing a major shortfall.

Adverse weather events are not exclusive to India. For example, the 2021 summer was one of the hottest in Europe. However, agriculture in the west is highly mechanized and better prepared. As India is a manual, fragmented, and massive agrarian economy, any uncertainty can potentially impact the entire agri-ecosystem. Furthermore, climatic uncertainties are not the only one that is emerging. The Indian agricultural sector must also navigate global factors, public health crises, and economic challenges. All these uncertainties make it essential for us to transition to precision agriculture at a rapid pace.

Precision agriculture essentially involves leveraging satellite and information technology and traditional solutions and knowledge to empower cultivators with more control over farming and its output. Furthermore, it leads us to a system of managing agricultural practices with a



AMITH AGARWAL, Co-Founder & CEO, agribazaar

zonal focus rather than a regional focus. It essentially means that precision farming addresses problems at the field level and not at a block or state level. For a country like India, where the average size of operational landholding is 1.08 hectares, precision agriculture can benefit the sector and its massive farming community.

Agricultural technology has a critical role to play in infusing precision not only into cultivation but into the entire value chain. The following are some of the technologies that are essential for precision agriculture.

▼ Digitization

It is the most critical way of integrating the entire agricultural value chain and the 90 million farming households in the country. At the trade level, it helps make demand projections, facilitate global trade, and infuse transparency, trust and traceability in Indian agriculture. At the farm level, it plays a significant role in furthering education and knowledge sharing on agricultural practices and delivering goods and services to farmers. It essentially is the backbone of the Agri-ICT (information and communication technologies) solutions



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and other digital technologies deployed in the ecosystem.

▼ **GPS and GIS**

Global positioning systems (GPS) and geographic information systems are major enablers for farmers, helping them collect information in real-time and as specific to a location. Mapping fields, irrigation systems, soil-testing, supporting seed, weeding, and fertilization are a few applications of GPS. GIS is instrumental in mapping fields and plotting various information sets on the map for better planning and analysis. The information sets include soil type, moisture, nutrients, etc. It also makes multi-farm assessment possible.

▼ **Satellite remote sensing and mapping**

The technology helps capture satellite images and deliver the latest information in real-time on a host of agricultural parameters, including soil content and quality. Unlike GPS, this essentially does not need further workforce or fuel costs.

▼ **IoT and other digital technologies**

Many digital technologies like IoT, Big Data, and others can take meteorological sciences to another level in making more accurate, localized weather predictions. IoT sensors are also helping in data collection from the ground, ranging from air temperature and moisture levels to soil conditions and nutrient content.

▼ **Unmanned aerial vehicles (UAVs)**

Today, drones or UAV technologies are increasingly becoming of much use to farmers in many ways. They are being used for field surveillance and monitoring, field mapping and data collection determining drainage patterns, seeding, and insecticide spraying. UAVs are making farming less human resource and capital intensive. For low-landholding Indian farmers with low capacity to mechanize their farms like the US and the West, UAVs are becoming beneficial, affordable alternatives to expensive farm machines.

The Indian agricultural sector is fast adopting other technologies such as drip irrigation and solar technologies at scale to make agriculture more sustainable and ecologically friendly. Most importantly, agritech solutions enable site-specific crop management, by which localized fields can uniquely be assessed. It helps in addressing site-specific challenges. The 21st-century advanced Agritech solutions collectively would allow farmers to better prepare for the next farming season, enhance their capacity to plan against uncertainties, produce more at lower costs, and get better value for their yield from globalized trade.

Accelerating technology adoption is essential and not a choice for the Indian agriculture sector. It is a viable solution to increase agri-production amidst rising uncertainties. ■

The author is Co-Founder & CEO, agribazaar

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Impact of Web 3.0 on Cloud Services

Piyush Somani

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A new world is awaiting, the transition has started with, Metaverse, IoT, AI, and ML. A virtual reality universe where we can do anything – work, socialize, play games and more. It holds endless possibilities that will shape the future of the Internet

The world started to see the transition of the Web in 3.0 with, Metaverse, IoT, AI, and ML. It has prompted curiosity and created a sense of buzz amongst individuals, organizations, and businesses alike. As we all want to ensure the importance of preparedness, we also try to be forerunners in adapting to this new Web form. This is even when some scrutinize the emergence and forecasts of this new avatar of the Web's actual structure. It is expected that Web 3.0 will rise from and even accommodate various opposing ideologies and goals involving

several stakeholders' rights, from governments to international organizations, from businesses to individuals, and various web players. For a layman, it is just the updated form of Web 1.0's browser-based document access via HTML pages and Web 2.0's explosive growth in app development, content production, social networking, and e-commerce. But for a better understanding, we can call it a highly connected, context-based, and morally congruent network of people, machines, and AI.

The key point for discussion and even debate at times around Web 3.0 is the ownership or

controlling power over this updated version of the Web. What we must look at, though is the brighter side of how it will enable us to realize the actual potential of AI, ML, AR/VR, Blockchain, 5G, and IoT as long as formats, languages, and protocol standards are universally standardized.

▼ Web 3.0 and Cloud Services

Cloud services are high in demand since the pandemic has changed the way we work. Remote working is the new norm and having access to your data anywhere any time is just a click away. The cloud industry has opened up a new Web 3 track due to the maturation of block chain technology. This new methodology, the Web3 cloud computing network for privacy, has gained significant momentum. My main question is; how do anyone prepare their business for Web 3.0? In that case, we need to understand that AI and ML will play an essential role in this new Web version. Both technologies will allow gadgets to gather, analyze, and later transform content in human languages. For example, natural language processing (NLP) and AI-based technologies will enable organizations to understand their end customers in a better way. It will allow better functions with better insights, conversations, and mentions, creating a tailor-made experience for every customer. And when comes absolute independence in this new environment will be provided by cloud services, with no resource or physical restrictions. Apart from this, businesses can create a sustainable Blockchain environment while lowering expenses with the help of a cloud-based Blockchain as a Service solution. Also, end-to-end traceability and anti-counterfeiting can help minimize supply chain bottlenecks and safeguard data storage and sharing. Furthermore, it can help reduce authenticity and integrity disputes in the collaborative economy, and ownership logs and transaction data can facilitate the value exchange between people involved.

Many businesses are already using these Web 3.0-based technologies to enhance their current offerings. Examples include augmented reality to help with field service capabilities and IoT to facilitate scheduled maintenance, improving the overall equipment performance and lifespan and lowering costs. In addition, manufacturers can benefit from live virtual



PIYUSH SOMANI, CEO & MD,
ESDS Software Solution Ltd.

models created through Web 3.0 and generated utilizing cameras, networks, and sensors, including the ability to verify and evaluate strategic choices, display goods, and connect systems and procedures.

A Cloud Service Provider with tested goods and services that support Web 3.0 can facilitate this switchover and hasten the process of realizing benefits from this new paradigm. The relatable example is from the banking industry, which we come across daily; the Blockchain and IoT-based banking solutions have improved the overall customer manifolds. So much so that visiting a bank branch has become a once-in-a-blue-moon task. Many such cloud-based services, like Blockchain as a Service, Machine Learning Platform for AI, and Link IoT Edge, can assist organizations in embracing this new reality with confidence.

Web 3.0 will completely change the way consumers interact with the Internet. Instead of being restricted to a PC, users can experience the Web on the phone or travel from device to device because content and applications would dwell in the infrastructure facilitated by the “cloud.” Usability improvements will be crucial and must catch up for this new multiplatform paradigm to be successful. As Web 3.0 takes hold, Internet users and businesses doing business online will experience change. E-business models as a whole will be reviewed. And the ultimate base for all this to take it to the masses will only be through the cloud. ■

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Smartphones empowering digital transformation

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ZEE5, recently shared an online smartphone trends report released as a part of the ZEE5 Intelligence Monitor knowledge series. The report offers an analysis on the factors that are influencing the smartphone landscape, behaviour patterns of players and key trends that are likely to shape the future of India's online smartphone segment in the coming years

India's smartphone market size is expected to reach US\$ 281 billion and grow with a CAGR of 10.5% by 2028 as per a report by Research and Markets. According to initial findings from IDC's Worldwide Quarterly Mobile Phone Tracker, 35 million smartphones were shipped to India in 2Q22 (April-June), a 3% year-over-year (YoY) growth, while the first half of 2022 declined by 1% YoY to 71 million units. These figures are a reflection of the evolving consumption pattern where we are witnessing a high penetration rate across segments of society and age groups. The pandemic has given an unprecedented thrust to the user market with more and more services being enabled digitally and used through mobiles. The handheld device has visibly moved from a 'Fun' factor to a 'Functional' device.

ZEE5, recently shared an online smartphone trends report released as a part of the ZEE5 Intelligence Monitor knowledge series. Sharing insights from the report and a perspective on the evolving usage of smartphones and growth drivers, **Rajiv Bakshi, Chief Operations Officer, Revenue, Zee Entertainment Enterprises Limited (ZEEL)**, believes with 5G rolling out, the smartphone ecosystem is going to have a watershed moment. Users had found their one-stop-shop entertainment on their personal smartphones which is going to be turbocharged with 5G.

To get a perspective on the adoption opportunities around Smartphones ecosystem, **Minu Sirsalewala, Executive Editor, Special Projects**, interacted with Rajiv on the evolving consumption pattern and the driving factors fuelling growth and innovation. Also delving into how sensitive is the community to the growing e-waste peril? *Edited excerpts of the interview follow:*

▼ **There is a visible shift in the smartphone consumption ecosystem. Where do you see the next big opportunity? Which high growth verticals are instrumental in this disruption?**

We have seen a fantastic increase in digital penetration over the last two years. The smartphone market has changed completely to meet the needs of customers as a result of growing OTT consumption and social



RAJIV BAKSHI, Chief Operations Officer, Revenue, Zee Entertainment Enterprises Limited (ZEEL)

media, work and education from home, and the influence of content creators. This has resulted in increase and change in purchasing habits of the consumers when it comes to smartphones. The ZEE5 Intelligence Monitor also reported that 97% of the consumers replace their smartphones before its performance dips and for 52% the main reason is that they want to own a new model of the smartphone. It also highlights that men are more brand driven in terms of choosing their new phones while women are price and deal conscious consumers.

These are some factors that bring the visible shift in the smartphone consumption ecosystem. Having said that, with 5G rolling out, I believe the smartphone ecosystem is going to have a watershed moment. Users had found their one-stop-shop entertainment on their personal smartphones which is going to be turbocharged with 5G.

▼ **How is the smartphone ecosystem driving innovation at ZEE5? Are there any partnerships lined up that will fuel the growth?**

India's growing digital infrastructures like the advent of low-cost high-speed internet

and digital payments will certainly have an impact on every business including the smartphone market, a derivative that will amplify the reach of content creators and platforms. This will be possible because of the deep penetration of the device as a necessity across the length and breadth of the country enabling access to content to a larger audience base.

This also explains that the shift to digital consumption is rapid, and the need of the hour is to identify the consumer purchase patterns and preferences that shall enable brands to engage with their audiences effectively. Initiatives like the ZEE5 Intelligence Monitor help us understand just this and also become a guidebook for brands and marketers. We, as a consumer-first brand, have been using these insights and also have been aware of the innovations and developments across segments. We have also been actively investing in strengthening our digital ecosystem with the launch of the Tech and Innovation center at Bengaluru. This will enable us to be on top of the tech game and provide our audience with the best user experience across platforms.

▼ There is constant competition with growing integration of AI with data. How do you keep abreast of the game?

We launched the ZEE5 Intelligence Monitor knowledge series with the aim to track the transformative consumer behaviour across key industry verticals using the intel gathered from our highly engaged user base. India now boasts of the lowest data rates and a very fast-maturing digital-first ecosystem. It is also the world's second-largest market for smartphones. These factors have brought about a mobile and digital revolution which has been further bolstered by the growing integration of AI with data. At ZEE5, we ensure that we keep bringing in the necessary updates and improvements to our platform basis the data and insights we are able to study.

Also, being a part of ZEE, we are constantly working to enhance our technology capabilities to promote innovation, while enhancing the user experience on our platform. As a key player in the industry

with a rich repository of knowledge, ZEE5 is attempting to assist business leaders in making informed business decisions by presenting consumer insights unique to the industry through these vertical-specific reports.

▼ As per the survey findings, 97% of the consumers replace their smartphone before its performance dips. You have attributed this growth to consumers—especially women moving up the value chain; in addition, 60% metro respondents and non-metro users also catching up the consumption pattern. What is fuelling/influencing this improving purchasing capacity of the consumer?

Smartphones have always been an enabler, and everyone has found a use-case of their own. Now consumers are seeking for ways to improve their smartphone experience as it turns into a one-stop shop for all things entertainment, including video, music, and gaming, ushering in a new era of co-viewing and therefore connected devices and accessories. As per the Intelligence Monitor Smartphone report, customers are now replacing their old smartphones with new ones even before their performance deteriorates. The majority of consumers—roughly 97 percent—follow this pattern. It has not just eased a lot of things for the user but eventually has also become a status symbol that most users are gravitating towards. We also saw that as consumers give more importance to a brand's name and reputation when making a purchase, smartphones have transformed into status symbols.

This has definitely fueled the improving purchase capacity of the consumer along with the fact that companies have been working towards democratizing affordable internet access for the masses. Youth are particularly affected by this tendency, with brand reputation accounting for roughly 40% of smartphone purchases among them and features and technology accounting for about 20%.

The smartphone boom in India is also being fueled by the world's fastest-growing middle class, which has aspirations for both personal

advancement and a better future for the next generation. According to the report, 60% of the metro respondents said that they plan to upgrade their smartphones within the next six months, and non-metro users are rapidly catching up with the trend. Additionally, the survey states that roughly 70% of non-metropolitan customers frequently buy smartphones online. Hence, we can say that today, the smartphone has come to represent a modern, aspirational India, as a means to opening up new doors and prospects.

▼ Another important factor that will give an impetus to the market is 5G. As shared in the report, it will be a watershed moment for the smartphone industry. How does ZEE5 plan to tap this opportunity. Any initiatives that will expand the service offerings or the delivery of content pattern?

5G is indeed going to be revolutionary,

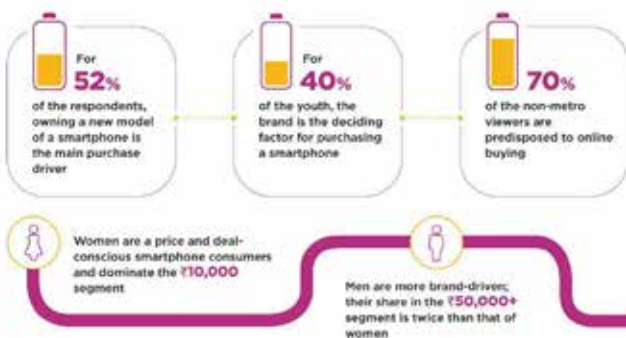
► Smartphones have become the new life partner



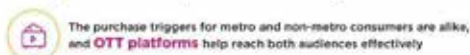
► ₹30,000 is the new mid-point for phones



► The many drivers of purchasing a new smartphone



► Smartphones and OTT platforms share a symbiotic relationship



Source: ZEE5 Intelligence Monitor — Smartphones Consumer Insights & Trends Report

especially for the industry we belong to. It is going to enhance the current usage for smartphones while allowing OTT platforms to provide more immersive experiences to its audience in the form of virtual reality, 360-degree videos and much more. Moreover, according to Intelligence Monitor, it is also going to enable AI and IOT to bring in newer use-cases for the consumers. In the future, smartphones will play an increasingly important role in our lives as we will be even more dependent on it for work and coordination, health and medical services and even travel and transportation.

And with ZEE launching the tech and innovation centre, the team is under constant R&D and is focused on a futuristic tech stack which will enable omnipresent delivery of entertainment across platforms. Our digital platforms will also be able to access other technologies such as AR, VR, NFTs, and relevant data models through the centre. This will enable us with initiatives that will expand the service offerings at ZEE5.

▼ On the downside there is an astounding spike in the e-waste market where the discarded mobile phones are a major contributor. What are your thoughts on sustainability and ensuring minimum contribution to the growing menace? As an industry any joint initiatives that both the manufactures and service providers are undertaking to address the e-waste management?

Sustainability is critical at every level, especially when it comes to being future-proof. Individuals, smartphone brands, and the industry together can choose to be more sustainable in their operations—like reselling phones that have not reached the end-stage or even opting for exchange offers while buying a new unit or handing it down to someone in need. All these measures can help to minimize e-waste. Manufacturers also re-furbish parts or units that can be used and recycle the rest. ■

Emerging tech as an enhancer

Satya Machiraju

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Here are five ways emerging technologies can be used to enhance traditional approaches to cybersecurity...

The digital footprint of organisations has expanded like never before amid the pandemic and this had led to increased cybersecurity risks and attacks. As per CERT-In, India alone has witnessed 1.4 million incidents in 2021 and 212,000 incidents in January and February 2022. In order to mitigate cyber risks and improve organisations' security posture, companies need to adopt a risk-driven cybersecurity program and optimise their cybersecurity investments. With the continuously evolving risk environment, here are some ways to use emerging cybersecurity technologies that will help organisations to navigate securely in 2022.

▼ **Have a better internal and external visibility.**

With ever-increasing vulnerabilities, organisations must invest in risk-based vulnerability management tools, in order to improve their internal visibility and enhance their operational efficiency. Organisations now need to improve their vulnerability management programs by adopting vulnerability prioritization technologies (VPT), which is the key to effective attack surface reduction. They also need to invest in technologies such as digital risk protection services, cyber threat intelligence, and security risk rating services for the overall external visibility of their assets.

▼ **Configure a zero trust model.**

The demand for hybrid work has accelerated the cybersecurity risks. In order to mitigate these risks, organisations must embark on their zero trust journey as a part of their transformation maturity. It is advisable to start with remote access and SASE technologies, micro-segmentation or even identity management tools to mitigate network/operating system or human vulnerabilities.

▼ **Make workspace safe with hybrid cloud security.**

We have seen a rise in demand when it comes to safer workspace environments. In order to curb the challenges posed by the cyber attackers, organisations must add a layer of security to their architecture,

infrastructure, applications and data across multi-cloud and hybrid cloud environments. This will also help organisations utilise their native cloud security controls which include threat detection as a service (TDAS), key management service, web application firewall etc. These solutions also measure compliance across multiple environments such as cloud security posture management (CSPM) DevSecOps and others.

▼ **Get a managed detection and response plan.**

In the rapidly changing digital environment, traditional security operations are failing to prevent the sophisticated techniques posed by attackers. Therefore, organisations need to adopt managed detection and response (MDR) solutions to help them anticipate and detect complex attacks using AI algorithms. The AI algorithms help to detect and orchestrate a response in near-real-time at scale. Advanced MDR platforms offer multi-vector threat visibility and help break silos by integrating security information within a single platform.

▼ **Implement privacy-enhancing computation (PEC) tools.**

When there is no protection against the prevention of privacy data breaches, malicious attackers can gain easy access to sensitive data and information without any permission. The PEC tools help protect and secure data and go beyond the traditional "data in transit" and "data at rest" approaches.

▼ **Conclusion.**

With the acceleration of digital transformation and the development of innovative technologies, India has been adversely affected by the rising number of cyberattacks. The adoption of new working environments during the pandemic made the role of cybersecurity even more vital than before. Innovations in cybersecurity are laying new foundations to defend against unwanted attacks on business networks and in order to be able to defend ourselves, we must keep pace with new technologies and their further development. ■

The author is VP, Information Security, Whatfix

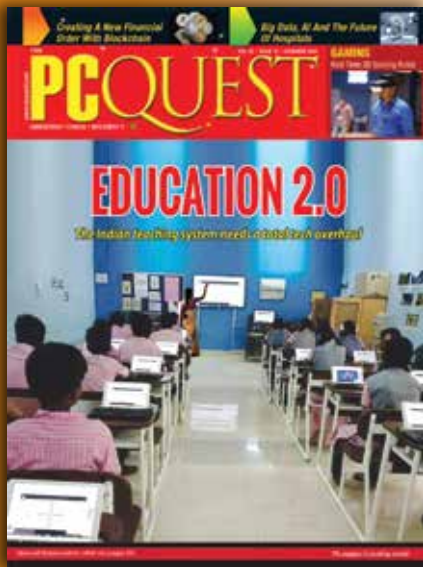
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How can technology revolutionize the HR industry?

Gautam Sinha

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Talent management has become a significant challenge for many organizations, and therefore there is a dire need to create solutions that focus on improving how human capital is recruited, developed, and retained

The Covid-19 pandemic underscored how technology is now the mainstay of every organisation's operations. It has influenced everything from the way we shop to the way we manage our money. Digitisation has profoundly changed almost every aspect of operations, altering work cultures for all time to come. The new normal requires businesses to find ways to not only set themselves apart, but also thrive. As it happens, technology has fundamentally transformed the recruitment industry, and this is most evident in large enterprises.

The talent management / recruitment technology market has experienced an explosion over the past few years. A variety of factors, including COVID and the gig economy, are influencing how companies manage talent. Investors backed promising HR technology companies with more than \$12 billion in venture capital in 2021, according to Boston Consulting Group.

▼ The Recruitment Industry

As one of the most paper-intensive and tech-resistant industries, human resources has certainly undergone a transformation unlike any other. In the days before the internet, resumes had to be emailed or sent to employers via snail mail. One had to look through job postings in the newspapers, find the addresses of such companies, and then start the application process. Globally, the HR process changed as technology, internet, and artificial intelligence took over.

Curiously though, even as employee engagement, payroll management, and other functions moved into the digital realm, recruiting (for enterprises/employers as well as talent sourcing firms) remained largely traditional.

▼ Is technology helping recruiters?

Machine Learning (ML) and Artificial Intelligence (AI) are firmly rooted in many industries as they provide end-to-end solutions to multiple tasks, which can help leaders create individualized strategies. Recruitment is no exception. AI and ML make recruiting easier by simplifying pre-screening, communication, and onboarding. By matching



GAUTAM SINHA, Co-founder & CEO, CBREX

candidates to new requirements, leaders can find new candidates faster and more efficiently. These technologies are being used by companies such as IBM, GE, and Hilton Worldwide to screen, test, and hire new employees.

By eliminating manual intervention, potential candidates can be screened faster.

▼ An unbiased approach

For filling open positions, talent sourcing firms and enterprises are limited to their networks. The result could be a bias by either party, conscious or unconscious, in the selection process.

The HR industry is in the midst of a massive push to eliminate bias in hiring practices. It is possible to level the playing field through smart recruitment technology. Specifically, it can improve job descriptions and posts. Additionally, it can help create questionnaires that are not biased and alleviate similar screening issues. Moreover, technology platforms such as CBREX use AI and ML to ensure that enterprises and talent sourcing firms get access to interact with each other without any bias.



▼ A level playing field

Both talent sourcing firms and enterprises have restrictions and limitations:

- A talent sourcing firm's success depends on its network. Business expansion is difficult when access is limited beyond this.
- In spite of their competence, small talent sourcing firms may not be able to meet the talent requirements of larger enterprises
- Recruiters in India rarely have access to global talent requirements.
- Enterprises rarely work with unknown talent sourcing firms

Using technology, enterprises and talent sourcing firms can gain access to a larger pool of resources to fulfil their needs on a level playing field.

▼ Efficiencies gained

Think of the possibilities if one had software that could automatically eliminate candidates based on certain keywords. The internet provides a variety of software and even filters for identifying candidates that may fit your requirements. Thus, technology makes recruitment less chaotic by cutting down hundreds of hours of tedious scanning and searching.

In fact, a global study by Eightfold AI, 82% of survey respondents say they will integrate more AI tools into their recruitment processes over the next five years. The efficiency

achieved saves time, money and efforts.

▼ Realtime updates

Many HR tech companies offer apps for real-time updates along with their platforms. These platform-based apps come with a host of advantages such as updates on potential candidates that companies might be interested in. Furthermore, candidates and recruiters can also chat via these platforms in case of questions, deadlines, or updates. This creates transparency between recruiters and candidates and helps clear up any uncertainty.

▼ Diversity

Business leaders now have access to a much broader range of candidates thanks to technology. The ability for recruiters to access a diverse pool of candidates is a huge differentiator in an era in which diversity is key to success.

▼ In conclusion..

Technology has great potential in the recruitment process, as in many other industries, but we need to keep in mind that technology will only serve as a catalyst to help expedite the process. To truly understand a candidate's mindset and needs, a human touch is still necessary. Human resources is not only about recruiting candidates, but also about understanding on a human level. Recruitment and talent management require a human quotient at all times. ■

The author is Co-founder & CEO, CBREX

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Breaking down India's crypto & Web 3.0 craze

Madhur Prabhakar

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A massive interest in cryptocurrency and Blockchain has fuelled a rapid transition towards Web 3.0, where we have witnessed exponential growth in interest especially in enablers like NFTs and the introduction of SBTs could be the final piece in the puzzle for the Web 3.0 ecosystem

Crypto has undoubtedly been on everyone's radar, regardless of the varied attitudes towards its growth or impact (yet) across industries and the mainstream.

While the consensus on what kind of effect it really brings to our society is still shaping up,

the data tell us how it is rapidly evolving and fuelling innovation across sectors attracting serious attention from diverse investors and governments, of course.

India has bagged the second position in crypto adoption worldwide, according to the 2021 Global Crypto Adoption Index by

blockchain data platform Chainalysis. India is now only behind Vietnam but ahead of global powerhouses like the US, the UK, and China.

India's global crypto market, like other parts of the Internet economy, is powered by the growing requirement for transparency and decentralization of archaic structures of authority.

Blockchain, the technology behind crypto, delivers the solution as once any piece of information is written onto the distributed ledger (Blockchain), it is immutable creating transparency and security. Utilizing blockchain we can safely store information over the shared system, where everybody can see but can't do any alteration. Blockchain technology should be utilized to monitor digital assets.

According to a report by digital asset exchange CrossTower and the US-India Strategic Partnership Forum (USISPF), Blockchain technology and Web 3.0 innovations will enhance the price of the digital asset economy from \$5 billion in 2021 to \$262 billion over 11 years, culminating in a \$1.1 trillion participation to India's GDP.

According to several Indian and global reports, reduction in transaction costs is further expected to propel this market growth in the next few years. In line with global trends, increasing adoption of the digital currency by businesses coupled with talks of a government-backed digital currency in the country, is further anticipated to bolster the growth of the cryptocurrency market.

In the present Web 2.0 environment establishing trust and creating social identities of the network participants has been an uphill task that the ecosystem is unable to overcome. And since almost all economic value is traded based on human relationships, it is a fundamental roadblock to innovation and growth in Web 2.0.

However, the outburst of cryptocurrency and Blockchain has fuelled a rapid transition towards Web 3.0 where we have witnessed exponential growth especially in enablers like NFTs, which has made possible acquiring, storing, and distributing economic value among users.

In fact, the introduction of SBTs (Soulbound Tokens) could be the final piece in the puzzle for the Web 3.0 ecosystem. SBTs help



MADHUR PRABHAKAR, Founder & CEO,
EQ8 Network

establish native Web 3.0 social identities that build social relationships of trust to tackle 'broader long-standing problems' of online communities.

▼ **Non-Transferable Assets: Soulbound Tokens**

SBTs are NFTs that a person can earn based in part on their job and education history. Unlike regular NFTs, they're non-transferable (though people can revoke them if they choose.) SBTs would represent a person's reputation and accomplishments, a kind of "extended resume". Once you receive an SBT, you hold it in a Soul wallet forever. A more technical definition would be that SBTs are non-transferable and publicly visible tokens linked to the soul address. The true power of this mechanism emerges when the SBTs held by one soul wallet can be issued or attested by others. Web 3.0 companies have already started the distribution of this technology.

As more and more young Indian investors are excited to explore newer investment options, they are adopting cryptocurrencies such as Bitcoin, Ethereum, and Polygon to make investments that promise them viable returns. These digital currencies along with other applications of Distributed ledger technology (DLT) have garnered significant attention leading to the rapid growth of the Crypto-led business innovations in India. ■

The author is Founder & CEO, EQ8 Network

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EASYFONE SHIELD+

Price: ₹ 4,499

In the crowd of smartphones, barely we do talk about any feature phone, but this time we have a special phone which is a perfect fit for senior citizens and trekkers. The rugged phone is certified with IP68, meaning it is waterproof, shockproof, and dustproof phone. It looks like one tough, but the back cover is designed a bit differently. Let's find out more –

▼ Build and features

It looks like any other feature phone though the phone is a bit heavy which is obvious because of its ruggedness. The back cover is removable but it's not like any other phone. It got four screws that hold the back panel tightly. This is a solid device that can easily handle accidental drops, spills etc. While testing the device, we dropped it from 4 to 5 feet, and there was no damage.

Compared to other phones, the keys are large but not enough for senior citizens. It has a 2.8-inch screen with a good amount of brightness and image clarity. It has a dedicated SOS button for any emergency help. One can easily configure to whom you want to be contacted for any emergency and with one press of a button the phone will send an SMS, trigger the siren, and make calls.

Shield+ comes with a photo speed dial feature. No need to look into the long list of contacts, you can create a photo contact of your most called or near and dear ones. This could be useful for people who can't dial a number, you can set up multiple contacts with photos so they can easily identify them.

▼ Performance

The Shield+ supports two SIMs and one microSD card. When I received the device, it shipped with a 2 GB MicroSD card. There is no setup required, simply insert the SIM and it is ready to use. One can easily set up the photo



Overall: **9/10**

SCORE

PRICE: **9/10**

PERFORMANCE: **9/10**

FEATURES: **9/10**

KEY SPECS

IP68 certification; Large Separated Button; Unique Photo Speed dial; Dedicated SOS button; 2500 mAH battery; Dock Charger

PROS:

Rugged; Battery; Decent camera; Dedicated SOS button; Photo speed dial

CONS:

Doesn't support instant messaging apps

dial and SOS kind of features. While using the device, we got no hiccups. The call quality is perfectly fine. The speaker volume is loud enough. The phone having a 2500 mAh battery can last for more than 2 weeks with moderate usage. Interestingly you can use the phone as a power bank to charge other small devices such as a smartwatch. It comes with a MicroUSB port, for charging and data sharing. However to make charging quick and snappy, it comes with a charging dock which makes charging super easy.

The camera is good enough. Surely there are no major functions you can expect yet the photos taken come with a good amount of details and clarity. Overall it is a good device, yet in today's world we all are using WhatsApp and other apps to be connected with our friends and family which is missing. I wish, in future, they would provide support to such apps. ■

Bottomline: Considering the senior citizen's requirements, Easyphone added almost every required feature in the Shield+ phone. Having a rugged device for the elderly is useful for accidental drops. For the trekkers, it's a perfect companion to be connected to the world.

SENNHEISER

INTELLIGENT SPEAKER

TEAMCONNECT INTELLIGENT SPEAKER

Price: ₹ 49,990

In the world of smart speakers, Sennheiser introduced an intelligent speaker for meeting rooms. The TeamConnect Intelligent speaker is claimed to be the ultimate audio solution optimized for midsize Microsoft Teams meeting rooms for up to 10 people. As you know, Sennheiser is a well-known brand in meeting room solutions, the new device is indeed an innovative solution for making meetings more focused. Let's find out its capabilities –

▼ Design and setup

It is a rounded speaker with a sleek profile. At first look, it can remind you of other smart speaker brands available in the market. The top doesn't have any branding, it houses seven beamforming microphones. There is a capacitive mute button that allows you to mute or unmute at any time during the meeting. The bottom holds an Omni-directional speaker that covers a radius of 3.5 meters.

The setup won't take much of your time. It comes with all the required connection cables. The speaker combines a non-detachable USB Type C cable that connects to a hub holding a USB type C port at one side along with microUSB and power ports at the other end. Connect the power to the hub and MicroUSB cable to the Microsoft Teams Rooms (MTR) console.

If you want to mount the speaker in one place, you can use the included screw mount or adhesive pad. Once you equip the Microsoft Teams room with the TeamConnects Intelligent speaker, your meeting participants are ready to go after the one-time installation.

▼ Performance

Sennheiser TeamConnect Intelligent Speaker works without additional devices like laptops or smartphones. It supports up to 10 participants in one meeting room. Participants can control the



Overall: 9/10

SCORE

PRICE: 8/10
PERFORMANCE: 9/10
FEATURES: 9/10

KEY SPECS

Cortana Voice assistance, Automated live transcription, 7 Beamforming microphones, High audio quality, up to 10 people collaborator identification

PROS:

Sleek design, Omnidirectional speaker, beamforming microphones, voice recognition

CONS:

Wish it could have fewer cables

meeting over the console and hands-free with the speaker's flawless integration with the voice assistant Cortana.

The intelligent speaker lets you create a live transcript of who said what in the room for each meeting. It can distinguish up to 10 different voices and display them as captions in real-time for remote meeting participants and people that are hard of hearing. The Office 365 Cloud securely stores the transcripts as text documents that you can access later for reference, share or delete at any time.

I used the device for our internal meetings and the experience was amazing. The omnidirectional speaker is powerful enough to fill a small room. The sound quality is impeccable, you can hear all the voices clearly. The integrated beamforming microphones are flawless in capturing participants' voices. This intelligent speaker is capable of distinguishing up to 10 different voices. It can display them as a caption in real time for remote meeting participants and people that are hard of hearing. Using the Cortana voice recognition, you can automate your meeting experience as well.

Bottomline: Sennheiser has designed a sleek and intelligent speaker which is the perfect device for the meeting room. With various amazing features, it provides an exceptional meeting experience. It's not just a speaker, it provides excellent meeting room audio and unlocks the best speech technology.

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Scan to
experience



Cheil-12943/22

A close-up photograph of a hand typing on a laptop keyboard. The lighting is dramatic, with a strong pinkish-red glow on the left side of the frame. A large, semi-transparent grey 'U' shape is overlaid on the image, framing the text below. The keyboard keys are visible but slightly blurred.

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