ENTERPRISES ARE ADOPTING CLOUD AS A DIGITAL TRANSFORMATION TECHNOLOGY THAT IMPROVES BUSINESS CONTINUITY

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The 'new normal' witnesses technical advantages brought by the hybrid and multi-cloud

At present 'work-from-home' is the new normal, cloud computing delivers opportunities for both business and social innovation as well as modernizing ICT. Cloud provides a platform for industries to develop and deploy new processes, systems and offerings that make their services more competitive.

Cloud computing refers to an on-demand, self-service internet infrastructure that enables the user to access computing resources anytime from anywhere. It is usually classified on the basis of location, or on the service that the cloud is offering. Based on a cloud location, it can be classified as: Public, Private, Hybrid and Community Cloud. Among these Hybrid cloud services are powerful because they give businesses greater control over their private data. Hybrid cloud services bring technical advantages for the industries.

Having a cloud computing environment, Hybrid cloud uses a mix of on-premises, private cloud and third-party, public cloud services with orchestration between the two platforms. By allowing workloads to move between private and public clouds as computing needs and costs change, hybrid cloud gives businesses greater flexibility and more data deployment options.

Hybrid cloud is also particularly valuable for dynamic or highly changeable workloads. Big data processing is another hybrid cloud use case. Hybrid cloud also enables an enterprise to use broader mix of IT services.

Firms have long been concerned about how to control where data is stored and who has access. There is a raising security concern as everyone is working from home. In this current scenario hybrid cloud can be opted as a solution for the concerns.

Enterprise workloads on cloud and increasing adoption of PaaS and serverless approaches, organizations are already looking at reduced infrastructure and related operating expenses during this critical period. Automation, powered by various technologies and converging together in the cloud platform, will help organizations manage their workloads remotely in a more efficient way. Hybrid cloud computing offers enterprises crucial control over their data and improved security by reducing the potential exposure of data.

In the below comments industry veterans have expressed their views on the adoption of cloud services in different types of industries, about security breaches and the future of hybrid cloud.

SUBROTO PANDA
Chief Information Officer Information Technology Group, Anand and Anand

"The need of the hour is to manage the enterprise application ecosystem at a large scale, remotely and in a secured manner, which has triggered organizations to evaluate and recalibrate their strategy towards accelerated cloud adoption to increase resilience and agility within the technology backbone of the companies at large.

Cloud is a server in Data center that hosts several number of servers and server-based software, which tenants can access from anywhere, at any time. With a cloud infrastructure, the law firm's server and IT platform is replaced by a hosted and managed virtual desktop that enables your entire staff to access applications and documents (including Word, Excel, Outlook, practice management, and billing software) using any device (a PC, Mac, iPad, etc.).

The benefits of using the cloud, after all, are indisputable, including scalability, reduced costs, less burden on IT, and rapid deployment but for law firms, this creates a complex conundrum. Every practice has a heightened need for security and compliance, thanks to sensitive client information, and firms of all sizes are understandably concerned about the safety of using public cloud computing services. In addition, even today, many practice management and other software packages require a server, which has traditionally been on-site, making cloud adoption daunting.

A hybrid cloud model helps organizations increase their speed to market by optimizing IT performance and providing the agility needed to meet changing business demands. Hybrid cloud models improve business continuity and reduce potential downtime and resulting costs. Business continuity basically means that in the event of a failure or disaster, business operations are able to continue as usual with minimal downtime or interruption.

Law firms choose where to house their data and workloads based on compliance, policy, or security requirements. The hybrid environment also lets security teams standardize redundant cloud storage, which is an important aspect of disaster recovery and data insurance.

A hybrid cloud's centralized management also makes it easier to implement strong technical security measures such as encryption, automation, access control, orchestration, and endpoint security so you can manage risk effectively."

SURESH KUMAR
Partner & CIO
Grant Thornton Advisory

"Cloud has changed the way enterprises plan and operate their IT infrastructure, applications and services. One of the biggest advantages of Cloud is business continuity. The entire business continuity strategy of an enterprise can be centered on Cloud. As cloud offers continuity of services in case of any disaster, enterprises can have their DR and backup operations on cloud even for applications hosted out of data center. In the current pandemic situation, cloud has helped organizations continue their businesses without impact.

Cloud can provide IT resources for the agility required by businesses. IT resources can be taken and configured quickly and for the time required. Many a times, organizations require a new business project to be tried before it is actually launched and flexibility of cloud ensures there is no capex expenses need to be incurred. The resources can be scaled up as needed very quickly. Most startups have used cloud effectively for fast growth. The current business environment is making all organizations act like startups and cloud is helping in getting the right resources at the right time.

Though cloud service providers take necessary steps to ensure security of data on their cloud, breaches do happen. To mitigate risk of security breach, organizations can chose to keep their confidential information in IT resources in their data center or private cloud. All other data can be kept on public cloud which offers cost advantage. Hybrid cloud offers best of both worlds and yes, we can consider it as the best option."

VINOD KRISHNAN
CIO, Indus Towers

"Cloud provides a level of abstraction and location independence to business continuity, both of which are essential in a business-critical uptime scenario. Moving to cloud implies a level of independence with regards to facility and infrastructure that gives substantial flexibility to business leadership by dynamically reconfiguring operations and critical functions for service continuity.

While it may seem like a distant requirement to consider taking all applications on the cloud given the latency and the security concerns, it still helps enormously to have capacity and resources on tap. Moreover, from a CIO's perspective, it is a vital element of the business continuity plans.

Cloud is therefore almost the only option for organizations to cater to rapid growth cycles. A business can later take the call to "regularize" their on-premise footprint to accommodate the growth and this may therefore not be permanent but on a short notice, it is certainly the best if not the only option.

Security breaches are a complex function of people, technology and process that at best is difficult to quantify. The trade-offs between security and compliance on one hand and convenience and user friendliness on the other is well established and the solution to this trade-off is a matter of building awareness (early on), maturing to a culture of information security that takes care of people and process equally.

Hybrid clouds complicate matters for security experts but, if properly configured, offer substantial visibility into the actions of employees, associates and partners in a way that anomalies can be quickly detected and addressed. Toolsets are now substantially more evolved and user-friendly, leading to quicker detection and analysis of incidents and threats. The network effect of the community of security partners and users in responding to threats and incidents also kicks in much quicker, ensuring that breaches are addressed or mitigated quicker than before. An intelligent mixture of on-premise, private and public clouds is the best hedge for an optimal security profile."

DEEPAK KALAMBKAR
AVP Infrastructure & CSO - SAFEXPAY

"Cloud computing can definitely make it easier for the business to carry on in the event of an incident. All key applications and services delivered by SaaS will continue to run automatically and in accordance with a business continuity plan. Also in this COVID-19 situation Cloud bought a relief to business, employees work did not get hampered as 90% originations had their setup migrated to cloud. It is easy to setup and cost for hardware is reduced.

The cloud allows organizations to decrease the time it takes to provision IT infrastructure, speeding delivery of IT projects that are critical to revenue growth or cost reduction. Teams are able to work more efficiently while remaining strategically aligns which allows organizations to go-to-market faster. Its resources get a chance to learn new things and do the setup in minimum cost, this saves company cost in terms of resources and admin costs.

Hybrid cloud refers to a mixed computing, storage, and services environment made up of on-premises infrastructure, private cloud services, and a public cloud such as Amazon Web Services (AWS) or Microsoft Azure with orchestration among the various platforms. Hybrid cloud option gives organizations the flexibility to support their remote and distributed employees with on-demand access to data that is not tied to one central location. Cost is a key factor for many organizations considering migrating to the cloud. A hybrid cloud is a great option for companies that want more security and control of their data but need a cost-effective way to scale their operations to meet spikes in demand (as well as long-term growth).

The hybrid cloud option means organizations can house their core, business-critical, and sensitive data on their private, on-premise servers while offloading less sensitive data and applications to the public cloud. A hybrid cloud environment gives businesses greater control over their data. As business needs to evolve and the demand for IT services fluctuates, organizations can scale their workloads accordingly. The hybrid environment also lets security teams standardize redundant cloud storage, which is an important aspect of disaster recovery and data insurance."

YOGENDRA SINGH
HEAD-IT/SAP, Barista Coffee Company

"The cloud offers the ability for rapid provisioning of computing resources and scaling those resources to align with changing business needs. Organizations can provision the infrastructure and computing resources they need, when needed and then scale back when they are no longer required. Cloud computing offers your business many benefits. It allows you to set up what is essentially a virtual office to give you the flexibility of connecting to your business anywhere, any time. With the growing number of web-enabled devices used in today's business environment (e.g. smartphones, tablets), access to your data is even easier.

Protecting your data and systems is an important part of business continuity planning. Whether you experience a natural disaster, power failure or other crisis, having your data stored in the cloud ensures it is backed up and protected in a secure and safe location. Being able to access your data again quickly allows you to conduct business as usual, minimising any downtime and loss of productivity.

Moving to cloud computing may reduce the cost of managing and maintaining your IT systems. Rather than purchasing expensive systems and equipment for your business, you can reduce your costs by using the highly experienced and educated resources of your cloud computing service provider. You may be able to reduce your operating costs.

Hybrid cloud refers to a mixed computing, storage, and services environment made up of on-premises infrastructure, private cloud services, and a public cloud with orchestration among the various platforms. Using a combination of public clouds, on-premises computing, and private clouds in your data canter means that you have a hybrid cloud infrastructure. The primary benefit of a hybrid cloud is agility. Not everything belongs to a public cloud, which is why so many organizations are choosing a hybrid cloud services. Hybrid clouds offer the benefits of both public and private clouds and take advantage of existing architecture in a data canter. The hybrid approach allows applications and components to interoperate across boundaries (for example, cloud versus on-premises).

Unless you have clear-cut needs fulfilled by only a public cloud solution or only a private cloud solution, why limit your options? Choose a hybrid cloud approach, and you can tap the advantages of both worlds simultaneously."

D V SESHU KUMAR
Asst. Vice President – IT Head, Orient Cement

"There is a demand as established companies move towards cloud technologies, companies expand IT departments and new companies. Great opportunities for fulfilling work with great pay. Overall, it is a great time to be in the cloud computing.

Cloud computing, and indeed the whole concept of Software-as-a-Service (SaaS), is continuing to grow in popularity. Already, these new web-based models of software distribution are completely transforming the way in which companies' access and store their business-critical applications and data.

One key benefit of cloud computing focuses on the IT infrastructure itself. A strong SaaS provider will have sophisticated systems that offer a much greater level of resilience than most businesses could ever create for themselves. After all, the SaaS service providers whole business depends on the service that it is providing. The important thing is to choose a reputable SaaS service provider, then businesses will increase their resiliency and strengthen their business continuity plans with agility, flexibility, and scalability.

The cloud allows organizations to decrease the time it takes to provision IT infrastructure, speeding delivery of IT projects that are critical to revenue growth or cost reduction. While a physical server could take days or weeks to procure and provision, a cloud server takes minutes.

Moving to cloud computing may reduce the downtime of managing and maintaining IT systems. Rather than establishing data centres and purchasing expensive systems and equipment for business needs. It all depends on the business model and approach. Traditional businesses like manufacturing etc., those industries having flat demand or consistency in the demand across the seasons, for those cloud computing may workout little expensive otherwise domains like ecommerce etc., where one cannot predict the demand will work out cloud computing very cost effective.

Hybrid cloud computing providers expose a set of software user interfaces (UIs) and APIs to allow users to manage and interact with services. The security is dependent on the security of these APIs. Cloud is safer than on-premise say that majority of security leaders.

Research results says that security professionals believe that the risk of a security breach is the same or lower in cloud environments compared to on-premise, it also says multi-cloud approach is seen to be more risky than hybrid and single-cloud approaches."

GYAN PRAKASH
VP - Enterprise IT, SCADA Geoinformatics

"Cloud based business continuity creates operational resiliency easier, faster and more economical for organizations. Enterprises now have the luxury of tackling downtime in system – the bane of any business that can stall production and impact revenue – seamlessly. And the benefits for company who take business continuity to the cloud are immense. Modern enterprise needs cloud based BCP & DR due its features as high availability, accessibility at remote locations, with easy back-ups, easy to restore mechanism from cloud, affordable and cost-effective solutions. Organization's business and technical teams need to reach a consensus on RTO and RPO values for the BCDR solution & sequentially categorize all data, systems and applications based on priority. Organization needs to leverage this by designing a cloud solution that manages data hierarchically – start with data storage, followed by backup and restore, and finally leveraging disaster recovery during a crisis.

Cloud is a model for enabling ubiquitous convenient, on-demand IT network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). Cloud providers share their physical or virtual resources to their customers via internet to remote places. There are industry standard's pay rates from various cloud providers with various terms and conditions.

Enterprises nowadays need the technological agility, flexibility and cost optimization that public cloud offers and the security, reliability and control that private cloud provides. They are increasingly moving towards hybrid cloud environments that are a win-win for them on all counts. Importantly, the combination of the public-private cloud means they can choose a suitable environment based on their workloads. While, hybrid cloud adoption is on trending, the security of such hybrid environments becomes important. Enterprises will do well to treat hybrid cloud security as a collaborative effort with their cloud service provider. A shared responsibility leads to a proactive mindset and helps identify any lacunae in the system or processes. Hybrid cloud security varies business to business due to deviation in business processes. To reduce the likelihood of human errors, enterprises can consider codifying secure processes into automated workflows. A uniform identity and access management framework will go a long way in protecting assets in hybrid environments. Access control assumes significance in this framework for both public and private cloud environments wherein employees and external consultants get access only to the resources they need."

DR. RAJEEV PAPNEJA
Chief Growth Officer, ESDS Software Solution

"Cloud promised and delivered few things that made the enterprises rethink, and ultimately for majority of them it seems to have become an affordable affair compared to the loss incurred for even a small downtime in availability of systems. Also, in today's eCommerce world, reputation loss takes precedence over business loss.

The biggest advantage that cloud provides to organizations is on-demand provisioning of resources, thereby decreasing the time to market for new offerings by organizations considerably. While purchasing a server could take anywhere from weeks to months, on cloud, it can be provisioned in matter of minutes. It also provides cost effective SaaS & PaaS solutions to experiment on new technologies and business models, without any heavy capital expenditure, and with the peace of mind that they will not be stuck with infrastructure or any software for life if it doesn't turn out as expected. With the pain of managing infrastructure and platforms out of the way, CIO's can put more of their time in transforming the organization digitally to create new arenas for growth.

Ultimate security is a myth! Security is an ongoing process and there is no magic bullet that can guarantee it. Properly designed and well thought Hybrid cloud architecture can help the organizations to decrease the number of breaches while making the least possible expenditure on security services. With hybrid cloud model, the organizations can use the public cloud counterpart for hosting data that is not mission critical, thereby having more control of critical data in-house. While on the other hand, if the data is required to follow certain compliance guidelines and the primary Datacenter does not have the compliance handy, hybrid model can come to rescue. While on one end it is true that it is difficult to steal if you don't know where the data resides, it is not to be forgotten that majority of these attacks are insider driven and hence unavoidable in many cases. With hybrid cloud model, it might become a little more tedious for the attacker since a) the attacker is not well versed with the security layers of the cloud service provider b) CSP keeps on updating the architecture with continuous audits happening on regular basis and c) CSP is more vigilant of data security as it is their bread and butter."

FAIZ REHMAN ABBASI
National Business Head - India & SAARC (Collaboration), Barco

"The outbreak of the coronavirus worldwide has fundamentally shaken up the business landscape and changed the way we work. While we were already preparing for the digital future of work, driven by mobile connectivity, cognitive tools and cloud, COVID-19 accelerated the transformation – pushing enterprises to enable remote working for their workforce, and increase business resiliency, by embracing digital transformation at unprecedented speed.

As our work gets supported by an ecosystem of remote resources, we are certainly going to leapfrog into a new mode of work wherein, organizations will allow employees to choose between working in an office or workspace, working remotely, or alternating between the two.

This new normal is the 'Hybrid Workplace', in which technology is going to play a pivotal role – which will be a blend of the physical and virtual experiences to keep the co-located teams on the same page with those that are remote.

Technological innovations provide a vital link between business leaders, employees, customers, and supply chains, as the world is learning how to adjust to the new 'normal'.

The organizations are finally embracing a truly hybrid model of remote and in-office working, with team members using video calls for meetings and collaboration. Such innovations offer enterprises new opportunities for growth as they enable better productivity and interoperability while making the workspace more agile and efficient.

At Barco, our key priority is enabling hybrid workspaces through solutions that offer seamless collaborative experiences, such as the wireless conferencing solution Barco ClickShare Conference. The innovative product, launched earlier this year, offers enterprises secure solutions for closer collaboration and immersive conferencing experiences, ensuring a cohesive hybrid workstation.

We are greatly concerned about the graveness of cyber threats and our solutions are designed to withstand such perils. Cyber-attacks have greatly increased during work from home and enterprises and individuals require secure and trustworthy products to counter possible breaches. Barco's ClickShare Conference is the perfect example of its focus on minimising cyber threats. Designed with safety, privacy, and confidentiality in mind, Barco ClickShare received the ISO27001 certification in early 2019, ensuring we handle both data and security in line with industry standard processes. We also implement necessary fixes and advanced features with every quarterly release, to ensure minimum vulnerability for our solutions."

ARIJIT DASGUPTA
Head-IT, Rupa & Company

"As we are into the manufacturing industry – manufacturing business domain has not clutched cloud technology yet is something unpleasant scenario.

As per Industry 4.0, automation in manufacturing and digital transformation have shown the industry to stay afloat with enabling technologies like AI, IoT, IIoT, Blockchain etc., along with the cloud only. Every equipment, plant, factory or supply chain transaction that is connected to the cloud helps professional management to keep organisations afloat with digital transformation is capable of giving employees secured and remote access to process essential data which has greatly helped the industry.

Finally– Cloud has enhanced the manufacturing industry by making the processes streamline in a faster manner and every successive stage more productive, cost-effective, and collaborative.

Grasp new normal like workplace reality in terms of setting up remote works. Collaborating among teams / team members with affordable & seamless communications (audio and video) to take decisions instantly, working together towards achieving the goal quickly.

Cloud-based internet security is an outsourced solution for any databank. Instead of having data locally, users prefer to store it on the cloud for accessing it anytime from anywhere with any devices using the internet. Data Centres manage these servers to keep the data safe and secure to access seamlessly on the internet.

Enterprises are moving to cloud solutions to solve a variety of issues. SMEs are using the cloud to cut costs. CIOs are turning to the cloud as the best way to store sensitive data easily with a cost effective manner, less headaches for their organisations.

Email is the biggest example. Most organisations don't bother saving emails to their own storage because devices are always connected to the Internet always."

SANJEEV SINHA
IT & Digitization, India Power Corporation

"Benefits of cloud have been seen in light of higher uptime, higher security and playing significant role in putting enterprise's disaster recovery plan in place. However, the recent pandemic has shown that high accessibility of data has become equally important to facilitate work from anywhere.

Today, business continues with people working from home/office/ other areas. Organizations with cloud computing services have switched to work for anywhere seamlessly and have continued with their business. Hence, a good cloud strategy is the need of the hour to ensure high level of business continuity. More and more organizations have realized it and this is proven from the demand surge seen in data centers.

Compared to on-premises hosting, most cloud hosting is safer, more reliable and scalable. Investing in IT resources even when need is less was investing only for future. Cloud allows investing for the present and hence delays higher investment till scaled up needs come up. Hence, looking at total cost of ownership over reasonable people of 5 -10 years, cloud solution offers better value for money and hence makes better business sense. Also, many organizations go for managed hosting and hence take the benefit of shared manpower without investing heavily on building such teams.

Hybrid cloud solution has been a cloud strategy and need of many organizations because of agility and because they want to optimize use of their own infrastructure too. However, despite the benefits of having hybrid architecture, most such cloud system come with a concern – security. This has been an important problem haunting organization.

While encryption of data has often been a possible solution to many security concerns, the high visibility and control has been an issue to solve. This means that since data is not visible easily, it become difficult to control it. Hence, it is important to recognize such a need and put automation tool to provide better control and visibility to the entire hybrid architecture."

SANDEEP JAMDAGNI
Head IT, Ashiana Housing

"Cloud services bring opportunity of building on demand or pay-as-you-go model for the business continuity program. Traditional business continue program (BCP) require redundant resources and big budget to keep the BCP operational. Cloud-managed service providers, provides customers with more flexibility and much less cost/maintenance. Already some of the organizations only use the cloud as an alternate operating site.

Organizations maintain their own data centre for normal operations and switches to the cloud during contingencies.

In the COVID-19 lockdowns, most of Business continuity programs were redesigned for the new normal of Work From Home. Flexibility of increasing or decreasing resources as per demand, make cloud infrastructure most suitable solution for the WFH scenario. Cloud provides the actual resource consumption details on any particular time of operation, which help in managing the cost and budgets. Real time resource and cost management is the benefit of cloud services.

Cloud services make an organisation more agile and flexible in terms of IT resources. One can customize what is required and till when it will be required. No long term commitments. Resources can be increased or decreased at anytime without any lead time. Organization hesitate on doing capital investments in infrastructure and services which may or may not be required in future, as its to difficult to predict exact growth. Cloud services provided OPEX model of investment, which is purely as per consumption. One have to pay for what they have consumed.

Moving to cloud from on premises will definitely increasing your attack surface area, but that doesn't mean that cloud is unsecure. Data security on cloud is joint responsibility of Cloud service provider and customer. Service provider is responsible for the availability of cloud infrastructure and customer is responsible for the implementation of correct and required data security solutions.

Most of the cloud data breaches happened either due to miss-configuration or customer didn't work on securing the resources and just relied on basic security provided by the cloud service provider.

Data security is an serious affair, it should be properly understood and implemented by the organisations, without relying 100% on the third party service providers.

Data security plan should be reviewed continuously and improvements to be done as per new emerging threats."

MANSI THAPAR
IT Leader, Head - Information Security, Jaquar Group

"Besides keeping critical data, applications and processes secure and the network running 24 x 7, modern IT departments are under constant pressure to implement new technologies that enable the business.

A viable tool for disaster recovery and business continuity is the cloud. Because cloud computing relies heavily on hardware-independent virtualization technology, it enables enterprises to quickly back up data, applications, and even operating systems to a remote data center (or cloud). Faster uploads and downloads of important computing elements naturally translate into faster recovery times for the business.

Cloud based business continuity has made achieving operational resiliency easier, faster and more economical. Organizations now have the luxury of tackling downtime – the bane of any business that can stall production and impact revenue – seamlessly. And the benefits for organizations who take business continuity to the cloud are immense.

Availability, easy restoration and back-ups, anytime / anywhere and cost effectiveness has paved the way for cloud acceptance for business continuity planning in various organisations

If an organisation has a hybrid cloud they have to deal with security. Whether it is pairing private and public cloud or running a complex, multi-cloud architecture, security is one of those areas where organisations can throw a lot of technology at the problem without getting results. What is needed is the precise mix of strategy and planning, followed by technology selection. Also, a key component in the mix is a single security toolset that covers public, private, and on-premises systems.

It requires organisation hybrid cloud owners to think differently— and holistically. First and foremost organisations need to start by understanding their own requirements and unique needs and not move in the same direction as peers. The organisation need to understand the market vertical they are in including any regulatory and legal compliances which need to be adhered to, clear idea of systems which need to be secure ie private, public and legacy systems, internal and external SLAs and security usecases.

Second most important thing where hybrid cloud is concerned is being proactive about security and make sure existing/legacy systems are also included in the same security umbrella

Thirdly leverage tools that are designed to secure diverse, distributed platforms. Systems like IAM, encryption, governance, compliance, usage based accounting, orchestration systems, security monitoring etc."

JAGDISH MITRA
Chief Strategy Officer and Head of Growth, Tech Mahindra

"As enterprises accept and adjust to the 'new normal', we have observed a tectonic shift in conversations around cloud from 'why cloud' to 'why not cloud'. In the post-pandemic world, we see opportunities in cloud infrastructure services and potential increase in the demand for specialized software.

A robust cloud infrastructure can strengthen the resilience and agility of an organization while ensuring business continuity. Keeping this in mind, most organizations are now prioritizing cloud computing and building hybrid cloud environments in order to manage IT networks in a secure and cost-effective manner. Governments and enterprises have started adopting cloud first policy so that more focus can be given to governance and business outcomes rather than the hassles of managing IT Infrastructure.

In a world where users, data and business process are increasingly becoming distributed, public cloud is becoming the platform for innovation. Shift to hybrid cloud architecture can help enterprises reduce cost, simplify IT management, provide security for mission-critical workloads while also enhancing agility and ensuring competitive edge in the ever-growing environment of constant innovation. We, at Tech Mahindra, offer a comprehensive suite of cloud services including hybrid, multi-cloud services in order to help enterprises succeed in their digital journey."

ARINDAM SINGHA ROY
Head Information Technology, EIUL

"Modern-age businesses with inadequate cloud infrastructure are hustling to ensure their business stability and continuity. Had there been no cloud, business continuity would have been under jeopardy. The Industry 4.0, smart manufacturing and digital transformation have helped the industry to stay afloat with enabling technologies like Artificial Intelligence, Internet of Things, Industrial Internet of Things, Digital Twin, Blockchain, etc., along with the cloud. Every machine, equipment, plant, factory, or supply chain transaction that is connected to the cloud is capable of giving employees secured and remote access to process essential data which has greatly helped the industry. Cloud has empowered the manufacturing industry by making the processes and every successive stage more productive, cost effective, collaborated, and streamlined.

Disrupting the lives of millions of people across the globe, the cloud has provided a cushion to industries against adherence to security compliances, made it easier to adapt to operational workflow transformation, ensured seamless employee-client collaboration, and helped embrace a new workplace reality. It improves the BCP and depreciates the impact of the incidents to the business. SaaS offers advantages over traditional computing. Better Network and Information Security Management. Disaster Recovery – Backup Management and Geographic Redundancy - gives better Recovery Point Objective (RPO). It decreases the Recovery Time Objective (RTO), Increased Availability. DoS Attack Depreciation.

Hybrid cloud refers to a mixed computing, storage, and services environment made up of on-premises infrastructure, private cloud services, and a public cloud with orchestration among the various platforms. The primary benefit of a hybrid cloud is agility for a competitive advantage. The hybrid approach allows applications and components to interoperate across boundaries, between cloud instances, and even between architectures.

In the view of the multiple security breaches occurring, securing the hybrid cloud as a shared responsibility with the best practices for securing the cloud should be; employ the principle of least privilege. Choose the right cloud security solution. Create a business continuity and disaster recovery plan. Secure all endpoints in the network. Encrypt data passing through the cloud. And last but not the least, Isolate the most critical infrastructure."

MANISH SINHA
Global Application Manager SAP, Busch Vacuum Pumps and Systems

"A corporate cannot neglect that hybrid cloud are the only options they have to go for in future as all they cannot host, all they cannot load on public infra, at times they also need flexibility and agility to move fast with fast decisions of the business. If they miss the train then Business will be nowhere at its destination and that journey would be really painful, we already have seen lot of example with very big giants on the very first day of their launch- customer site go crashed and customers never returned to them taking their first impression out there.

First and foremost, it gives a Greenfield to experiment for all upcoming technologies and even for legacy applications. Now various cloud option come with trial offers- which are useful for IT teams to do their experimentation and give recommendation to management as an influencer of technology. Earlier days this platform provisioning was a tough to get approval from management.

The next great factor is speed, it really works fantastic when we discuss and see the results on screen with the help of tools like AI. It brings automation to many manual tasks and that increases organizational efficiency. When we see RPA like technologies leveraging in service desk management that itself is a promising business case for a company having multi-country operations and where people are working in different time zones.

We cannot be everywhere to control breaches. These are both internals and externals. So somewhere we must draw a line and start trusting solutions, solution providers and our own ecosystem. But yes, we cannot control all of them with a single point strategy. But instead we must look for different avenues of contributions such as some could be control and managed by tools, some by policies and some from employee or vendor /supplier agreements such as code of conduct, supplier agreements etc.

It all draws from board room where technology does not mean only IT department as accountable but where promoters believe that business is there baby and all departments are enabler and helper to make that baby grow as per board room's wish but the room has to give full trust and ownership to decide what is best for the baby then later as per budget they can decide which route to take and finally reaching the ultimate destination."