

# THE TECH CAPITAL

## [5 experts on what 2022 could mean for cloud and tech infrastructure](#)

With the Covid-19 pandemic having pushed digital adoption to new levels, 2022 is set to continue to deliver tremendous growth and change to the tech space.

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The use of digital has never been greater. From streaming services to cloud adoption, online banking, ecommerce, gaming and now the surge in developments around the metaverse, the past 24 months have seen a tremendous acceleration of technology services adoption and conversion by millions of businesses and users across all regions.

According to a [McKinsey Global Survey of executives](#), companies have accelerated the digitization of their customer and supply-chain interactions and of their internal operations by three to four years.

The share of digital or digitally enabled products in their portfolios has accelerated by “a shocking seven years”, the same study found.

With many trends, which before were forecasted to become mainstream between 2030-2050, having become the norm, the cloud and tech infrastructure sector has had to step up to the challenge of keeping the world connected and life not disconnected from real-life interactivity. And 2022 is set to continue this demand.

To that extent, *The Tech Capital* asked five experts to share their views and insights on what 2022 has in store for cloud, data and technology in general.

**Aron Brand, CTO, CTERA**



***Aron Brand, CTO, CTERA***

With environmental awareness growing globally, sustainability is becoming a key element of organizations' strategies. I expect 2022 will be the year when this message truly takes hold in IT.

We will see IT teams from small and large organizations alike put in place sustainability programs with the goal of decreasing energy consumption, minimizing electronic waste and reaching carbon neutrality.

Migrating to the cloud is one of the simplest ways to achieve this, as cloud providers have been investing in clean energy, are benefiting from economies of scale and are able to pool resources to reduce waste.

We will see cloud vendors focusing on this competitive advantage and promoting cloud migration as a greener alternative to legacy datacenters.

**Paul Speciale, CMO, Scality**



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Firstly, cloud providers will emerge to address the need for regional/governmental data sovereignty concerns. We expect to see local and regional service providers increasingly introduce sovereign cloud service offerings that guarantee an organizations' data remains within specific geographic boundaries.

Growing concern over-reliance on technology providers and cloud services based outside of their regions, has driven new data sovereignty regulations which aim to boost the region's strategic autonomy in the digital sphere, such as the Data Governance Act in Europe.

With organizations scrambling to keep track of the location of their data and comply with local regulations, the industry is ripe for new service provider offerings.

On a second point, artificial intelligence and machine learning operations will be applied to help deal with massive data growth and IT skills shortages. While data volumes continue to skyrocket, the data storage industry must also contend with a skills shortage.

It has been estimated that within the next ten years, storage administrators will be handling 50 times more data, despite a 1.5X increase in the number of skilled personnel.

Throughout 2022, we expect to see greater integration of artificial intelligence and machine learning operations (AI/MLOps) into large-scale data storage solutions to meet these challenges and help administrators offload and automate processes such as basic systems and alert monitoring.

AI/MLOps tools can also boost the overall efficiency of the storage system by identifying and eliminating waste.

**Steven Groenke, CEO, Storbyte**



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Digital information is now entrenched in every aspect of our lives. Our society continues to generate massive amounts of information, while demanding immediate access. It appears our appetite for expanding digital platforms will be unstoppable.

Each day on this planet we generate 500 million tweets, 294 billion emails, 4 million gigabytes of Facebook data, 65 billion WhatsApp messages, and 720,000 hours of added content daily on YouTube. It is obvious...we will demand more data storage.

**Cloud**

On a global scale, data centers utilize about 416 terawatts of electricity each year, which is about three percent of all electricity generated in the world.

Cloud-computing infrastructure will grow from \$59 billion in 2021 to \$100 billion mark in 2022, which will continue to increase electrical consumption demands.

**Environmentally Friendly Storage**

Novel approaches to high efficiency data centers with a focus on sustainability is the future in 2022 and beyond. Lower power consumption technologies will emerge, and compute and storage providers will announce new Eco-Friendly technologies.

**Artificial Intelligence (AI)**

Rising energy futures will put pressure on AI data centers, based on their high-power consumption to processing ratio. 2022 will be a crucial year as we witness artificial intelligence continue to stride along the path to turning themselves into the most disruptive, yet transformative technology ever developed.

**Quantum Computing**

The future of quantum computing is not here yet, but now is the time to prepare for the Quantum Revolution.

This includes putting thought into how quantum computing will impact your business, even though we will unlikely find quantum computing developments useful in 2022.

Quantum computing will advance energy, medicine, materials science, AI, machine learning, healthcare, encryption protocols, security, and defense systems, just to name a few.

### **Network-as-a-Service**

The adoption of the Network-as-a-Service (NaaS) will become mainstream. NaaS is a cloud model that enables users to easily operate the network and achieve the outcomes they expect from it without owning, building, or maintaining their own infrastructure.

Users can scale up and down as demand changes, rapidly deploy network services, and eliminate all associated hardware network costs.

### **Containerization**

Containerization is the packaging together of software code with all necessary components like libraries, frameworks, and other dependencies, so the software or application can be isolated and run consistently in any environment on any infrastructure.

Over 75% of companies will be running containerized applications by the end of 2022.

### **All-Flash is the Future**

The solid-state drive (SSD) will continue to experience growth in 2022. Beyond storage performance advantages, SSD technology reduces power consumption and heat rejection.

The cost of flash continues to decrease and remains more reliable than hard disk drives (HDD).

By contrast, the HDD market share has shrunk from its \$34 billion peak in 2014 and is expected to plummet to \$12 billion by next year.

**Tim Klein, CEO, ATTO Technology**



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It goes without saying that data in all its forms is rapidly growing in volume, and the quicker this data can be accessed, the greater its value.

With no new, faster storage media on the immediate horizon, I expect that 2022 will see a focus on more efficient approaches to deliver data. It is an exciting time for storage and network connectivity with so many new technologies in the market: NVMe, RDMA, PCIe 4.0, and Gen7 Fibre Channel have all opened up new opportunities and potential for organizations and channel partners to explore in 2022.

For example, a little-known story of 2021 was the growth of Fibre Channel, and we expect this trend to continue throughout the new year, especially with new PCIe 4.0 and Gen 7 products and the maturation of NVMe over Fibre Channel.

**Candid Wüest, VP Cyber Protection Research, Acronis**



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Cybersecurity is making the headlines more and more, and this is unlikely to change throughout the coming year.

Despite recent arrests, ransomware will continue to be one of the most profitable cyberattacks, and we expect it will enlarge its scope to reach new environments such as virtual systems, cloud, and IoT.

We have seen groups rebrand to evade investigations, and ransomware-as-a-service will acquire smaller ransomware groups.

This resilience and agility will likely continue, so much so that by the end of 2022, ransomware operations could well look very different to today.

Organizations and security providers must match this level of flexibility to respond to the changing threat landscape.