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# **Top Data Center Trends for 2022**

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The data center industry has been facing major shifts and expedited growth to meet connectivity demands. Having grown and adapted to meet increasing capacity and connectivity requirements over the years, data center providers stand ready to meet 2022 head-on. As expected, the demand for data center services will continue to rise (predicted to reach \$227 billion in spend this year), and industry trends will continue to evolve.



Data center businesses must be flexible, adaptable, and agile in an industry defined by rapid growth and change. From infrastructure efficiencies to higher server requirements, technological advances continue to redefine data center design, operation, and maintenance. If your IT infrastructure plans include leasing data center space, it's essential to be aware of these significant trends so you can meet your organization's needs today and in the future.

# The rise of hybrid data centers

Hybrid IT is a computing model that uses a combination of on-premises and cloud-based systems. The data center industry was already responding to the hybrid IT trend when the COVID-19 pandemic hit. Suddenly, every business began to reconsider its reliance on on-premises systems, and the cloud became an increasingly critical part of enterprise operations. As a result, spending on public cloud services is predicted to exceed <u>\$480 billion</u> in 2022.

As companies continue to jump on the hybrid bandwagon accelerated by the recent pandemic, the industry is shifting to meet the demand of new cloud computing trends and adjust for the needs of its users and future growth. Many companies adopt hybrid IT for heightened security, storage flexibility, and cost efficiencies.

# Agile frameworks to support business flexibility

For businesses, 2020 brought into focus their barriers to resiliency and agility. Adequate preparation for change—composability—would be required to survive disruptive and tumultuous changes. Leaders must be ready to make changes, even daily, to orchestrate favorable outcomes for their business.

Composable business flexibility requires agile frameworks, which allow for quick changes in design and implementation. Like construction blocks, a flexible model begins with each piece placed where it is needed to support the final structure. Then, leaders seamlessly move individual blocks to support stronger, more efficient designs as desired without affecting the structure's integrity. This framework is a considerable departure from the traditional waterfall model, wherein each step must be completed before moving on to the next. Agile frameworks are perfect for data centers because they allow for quick changes in design and implementation to meet customer needs. With composable business flexibility, data centers can quickly adapt to evolving needs and stay ahead of the competition.

## **Regional cloud ecosystems reduce latency**

Regional cloud ecosystems are becoming more critical as companies seek to reduce latency and protect their resources. By 2025, it's predicted that <u>85 percent of infrastructure strategies</u> will integrate colocation, cloud, on-premises, or edge delivery options, compared to 20 percent in 2020. By replicating services across multiple geographic locations, administrators can avoid any potential single points of failure. For example, if there was a power outage, resources are quickly moved to another regional zone, thus reducing downtime and saving revenue.

This trend is significant as more businesses look to move to the cloud. And with more companies moving to the cloud, providers must continue to invest in their infrastructure to meet growing demand by offering scalable solutions. By creating regional cloud ecosystems, providers can ensure that their clients have the best possible experience.

As more companies move to the cloud, providers must invest in their infrastructure to meet the growing demand by offering scalable solutions in multiple regions. By connecting these into regional cloud ecosystems, providers ensure that their clients have the most seamless experience.

### Initiatives to enhance sustainability

In the spring of 2021, Gartner found that <u>45 percent of CEOs and senior executives surveyed</u> believed that climate change mitigation impacted their business. Going green has become a prevalent and essential trend in business, and data centers are no exception. As our reliance on technology grows, the data center industry becomes increasingly visible as a significant energy user. Unchecked, the data center industry's carbon footprint will expand in lockstep with the world's digital footprint.

Many of the several ways that data centers pursue sustainability are surprisingly straightforward. Coupling energy-efficient equipment with power management strategies, for example, reduces the amount of energy a data center uses. In addition, simply recycling and reducing other waste are excellent ways to make a data center more sustainable.

Another significant sustainability trend in the industry is the use of renewable energy. Whether directly or indirectly, data center providers seek to reduce their reliance on fossil fuels with economical portfolios of renewable sources such as hydro, solar, and wind.

Sustainability is a significant trend among data center providers and their customers alike. Both parties achieve and advance their corporate sustainability goals more quickly by working together, positively impacting our environment and their bottom lines.

### Hyper-automation to keep pace with rapid growth

Hyper-automation is a term used to describe the increasing trend of automation across multiple systems. Artificial intelligence (AI), robotic process automation (RPA), and integration platform as a service (iPaaS) are all examples of automations that help scale data-intensive tasks for increased efficiency.

There are several reasons why hyper-automation is becoming increasingly important in data centers. First, the growth of data is outpacing the growth of manual labor. As a result, automation has emerged as the only efficient means to aggregate and analyze the sheer amount of information generated by modern businesses. Additionally, the rise of AI and machine learning has increased automation quality, enabling companies to redirect human resources more efficiently and reduce the cost of doing business.

Ultimately, the trend of hyper-automation is crucial because it allows businesses to keep up with the growth of data, and even to leverage it to their advantage. By automating multiple systems within a data center, companies can save time and money while still delivering quality services.

### Developing a single source of truth

A single source of truth (SSOT) is a term used in business and technology to describe a system in which data or information is stored in a central location and then accessed by authorized users. The SSOT can be used for various purposes, including managing customer data, tracking inventory, or coordinating company operations. The SSOT is becoming increasingly important with a growing distributed workforce.

The trend of developing a single source of truth is vital for data centers because it enables dispersed teams to work together more effectively. By having all the relevant information centralized in one place, team members can easily share templates or guidelines, and customers can rely on companies to provide accurate and consistent communication. By consolidating data into a single repository, data center operators can quickly identify and address performance

issues. Additionally, the SSOT can help companies manage their cloud infrastructure more efficiently.

Developing a single source of truth is becoming increasingly important as companies undergo digital transformation. By centralizing data and information, businesses can improve their customer experience and operations. Developing an SSOT is essential for streamlining teamwork, managing cloud infrastructure, and providing customers with reliable information for data centers.

As we move into the future, data centers will continue to evolve and change. These trends are just a tiny glimpse into what is to come. To keep pace with these rapid changes and deliver the best service to customers, data center operators must keep an eye on these changes, as they are sure to impact your business in some way or another.