

Data centers have been the backbone of the technology era. Keeping users connected to the technologies that help them work better and smarter. Over the last 18 months digital transformation has accelerated at a rate in which no one could have expected. This transformation has kept people connected when it wasn't possible to meet in person and helped to keep businesses running through online shopping and virtual meetings. But, through this accelerated change has the Data Center and the importance of its function in the drive for digital transformation been considered?

Public V Private

Most analysts predict that all enterprise companies will continue to have a mix of Public Cloud, Private Cloud and traditional IT for years to come. These multi-cloud strategies leverage both Public and Private resources and functionality, as well as an on/off-premises approach. This blended approach is not driven by an inability to successfully go 'all-Public' and move everything to the Cloud but rather there is the recognition that the right workload should be placed in the right location, for the right reasons, and at the right cost.

It is no longer public or private, it's both. IDC found in a recent customer survey on cloud adoption that 14% of customers planned onpremises only, with 2% planning public cloud only. Whereas 84% of customers are planning a hybrid cloud approach. Analysts also predict that until at least 2024, over 50% of businesses infrastructure spend will not be public cloud but will be dedicated to on-premises data center/infrastructure spend and should therefore remain part of an organisation's overall IT strategy. As the world continues to grapple with the implications of the pandemic, and business leaders rebalance their IT spend between public cloud and their data centers, many companies need to upgrade and enhance their data centers accordingly.

Remote workers are less tolerant of technology not working, so regardless of if they access business tools and data in the cloud or their own company's data centers, they expect it to be available and resilient. As well as the consumers who want to transact digitally anytime, anywhere and without disruption.

The Next Generation of Data Center

Organisations need to evolve their on-premises IT capability into a next generation data center to ensure the infrastructure is resilient enough to keep up with the growing demands of digital transformation. In addition, data is at the heart of digital transformation. Companies are leveraging data to improve customer experiences, open new markets, make employees and processes more productive, and create new sources of competitive advantage – working toward the future of tomorrow. The competitive advantage of digital transformation and utilisation of data will only be possible once the data center has been modernised.

The next generation data center is needed to create a private cloud (or Infrastructure as a Service (laaS)) whilst also providing an 'evolve and enhance' approach for those workloads. This investment will allow the infrastructure to remain agile and resilient, with greater scale for future transformative projects. For those companies who have deferred or paused investment in their data center facilities and on-premises infrastructure, this could be a challenge and could have longer term implications on business growth.

In order to deliver increased capability onpremises, the estate needs to be agile and available for consumption. Businesses need to consistently extend into the public cloud; be it for new workloads, migration, mobility, or disaster recovery — and where possible have a common set of technologies, skillsets and operational tooling, to allow for financial insights and transparency.



And, they need to provide the business' workloads with seamless scalability, whether in the public cloud, or on-prem in their private cloud/lagS.

How to Modernise the Data Center

Modernising the data center, to provide greater agility and resilience for businesses growth, requires a dual approach.

First, identify the traditional workloads that are 'never-cloud' (regardless of public or private) and optimise these. Create a capability on-premises for these workloads to echo the characteristics of the Public Cloud. This new environment will allow these workloads to be agile and pre-empt the need for future scale in response to end-user demands.

Secondly, for new and existing workloads suitable for cloud-like platforms, and are to be hosted on-premises (for the right reasons), design and build a software defined data center (SDDC), comprised of software-based infrastructure and capabilities, residing on hyper-converged infrastructure (HCI) platforms. This builds a conduit or stepping-stone into or from the public cloud and supports a hybrid cloud strategy. The SDDC can be easily adapted and upgraded to suit the needs of digital transformation projects, at any time.



of customers are planning a hybrid cloud approach



of business' infrastructure spend will not be public cloud

Benefits of a Software Defined Data Center

The software defined next generation introduces the following benefits, in order to support workloads that are more flexible, scalable and elastic.

- Services approach rather than siloed
- Next Generation Virtualisation and PaaS
- Support both a combination of virtual machines and containers
- Software Defined Infrastructure (Compute, Storage and Network)
- Highly Automated and API Driven
- Scale-Out (all layers) incremental growth
- Future Infrastructure Infra as Code/FaaS

As the world continues to demand more from technology and its uses, both as a consumer and an employee, it is important that businesses remain resilient, agile and focused on digital transformation. The data center, regardless of whether on-premises or part of a hybrid strategy will continue to be the backbone for businesses, so long as businesses are prepared to invest and modernise the data center.

