

Are data centers dying?

In my opinion – no, but they are undoubtedly undergoing a transformation.

Today's data centers are being repurposed to deliver the right services at the right time, and at the right cost: making an evolution journey from hardware-centric to service-centric.

Traditional data centers provided limited and restricted functionality owing to the inefficient processes and layers of complexity associated with deploying and managing multiple layers of infrastructure. Today, organizations are under immense pressure to keep pace with the demands of rapidly changing business models and innovate at a much faster pace than ever before; the delivery modes of IT infrastructure and services are adapting to meet these demands.

The growth in data has forced most organizations to revisit their data center strategies by developing new operational capabilities such as software-defined infrastructure, analytics, and the increased adoption of cloud platforms. A greater amount of effort within data center transformation is being directed towards reducing complexity and providing more streamlined operational models for the core and edge of IT infrastructure. With these new edge and modern data centers, organizations aim to accelerate the deployment of resources for better-optimized workloads.

The journey to cloud



Adoption of cloud - private, public, and hybrid - is rapidly increasing. Analysts predict that even conservative organizations, which formerly subscribed to a "no-cloud"

policy, will get there soon. Gartner predicts that by 2022, the market size and growth of the cloud services industry will proceed at a pace nearly three times the growth of overall IT services. Corporations with 'no-cloud' policies will be as rare as those with a 'no-internet' policy.

Niche Cloud Service Providers (CSPs) entered the cloud market promoting the efficacy of a "pure cloud" play. On the other hand, key technology veterans enjoyed a huge legacy software installed base and positioned their respective hybrid cloud while trying to strike a balance between cloud and on-premises systems. It has worked well for both of them to be positioned as leaders in this new era of transformation

The transformation challenges



IT executives face a complex set of competing priorities to balance "Run to Change", when considering how to transform their data centers.

The first of these is to determine how to modernize the legacy footprint and monetize the cost of operations. A key initiative in this transformation journey involves identifying potential workloads that are better serviced on public cloud platforms, and workloads that are good to be kept within the data centers and continue to leverage existing investments on infrastructure.

The second set of priorities are to ensure that internal business units have easy access to the IT resources that allow them to transform core services. It should help them enable new digital experience for their end users, identify how IT can contribute to generate new revenue streams, and help them mark distinction in the market. This includes bracing new cloud-native applications development, enabling easy or ready to use platform for developers, whether they develop on/off-premise. In addition to this, as new cloud-based applications development mature or demand increases or it becomes more strategic for business, then, that's the time for organizations to decide if it makes more business and commercial sense to bring them back to data centers.

To make transformation work successfully at

both fronts, organizations are collaborating closely with internal stakeholders to formulate a plan to undergo transformation across the whole organization. This includes reevaluating on / off-premise infrastructure investments, enabling a platform to help the staff to develop new skills, developing a resource pool to support transformation journey working hand in hand with lines of business to ensure business continuity and competitiveness. In most of these scenarios, organizations are looking for experts to guide them navigate these changes as effectively as possible, because this is indeed a new and bold territory for many of them.

Enabling a true hybrid experience



In essence, what we are describing here is the adoption of a hybrid-cloud environment, which provides organizations the flexibility to run workloads on/off premise, platforms

that are well-integrated to enable seamless movement of workloads between on /off premise, a single pane of glass to manage seamless operations, and provide a truly hybrid-experience. Having said that, true hybrid experience cannot be realized by using conventional platforms alone.

A true hybrid experience requires a transformation of technology and operations, i.e. people and processes that deliver value to the business must adapt to the model. Enriching skills, redefining processes, resetting priorities are typically the most difficult steps to data center transformation and modernization. While some choose to take a step ahead and transform themselves, others choose to redirect human capital towards driving new business innovation. As part of this journey, many decide to move conventional applications onto enterprise-class public clouds that can guarantee enterprise SLAs. They shift the human capital investment that was used to manage those applications—the people and skill-sets within IT—toward more innovative projects that directly promote business value.

Whether organizations decide to modernize their data centers, adapt managed provider

platforms or both, they need a trusted partner who can help them navigate best-in-class solution and services in their transformation journey.

Many organizations approach this transformation in a phased manner: they begin by modernizing infrastructure, then automate IT services, and incrementally transform people and processes to support business. Others may want to jump-start the process all at once to transform as quickly as possible. To facilitate the jump-start approach, many vendors have created the best of breed, ready-to-consume hybrid-cloud solutions.

Organizations are also discovering that this combination of tools, built on best-in-class services and proven IT strategies, may best deliver for data center transformation.

Next-gen data centers



Next-gen data centers constitute evolution of merging IT where resources are abstracted, hardware complexities are zeroed-down, workloads run seamlessly on most appropriate set of

resources, and static infrastructure transform into dynamic, workload-aware, pattern-driven methodology that can proactively forecast demand and respond with utmost speed. This journey requires a two-fold change — organizational and cultural. Those who succeed will witness the new way of working, drive innovation, and make use of rapidly evolving technologies to speed-up their go-to-market strategies. This will be the beginning of Next-Generation Data Centers.

About the Author



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