Five Hybrid Multicloud Cost Optimization Strategies

The IT industry is facing a challenge in which technology is growing more sophisticated and data is multiplying rapidly, but company budgets are becoming tighter. Gartner forecasts that by 2025, more than half of IT spending will be in cloud-related categories. As businesses build their future with hybrid multicloud technologies, cost optimization strategies can help navigate through challenging economic times.

Many IT cost optimization strategies are built around modernized IT systems and new cloud capabilities such as hyperconverged infrastructure, which consolidates and virtualizes data centers, enabling scalability with less hardware and space compared with traditional data centers. A modernized data center can more easily evolve into hybrid multicloud operations and allow applications and data to be placed on premises or in different public clouds to fit particular business needs. Turning to unified data services, automation and infrastructure-as-a-service offerings can help IT teams harness new innovations while managing complexity and operational costs.

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What Is Multicloud Cost Optimization?

Operating in a multicloud environment comes with certain costs, such as those for cloud services and multiple necessary APIs. In an article for the Walmart Global Tech blog hosted by Medium, software engineer Rupesh Patel poses the question, "Enterprises are spending huge money on cloud services, the bigger question here is — are enterprises spending wisely, optimally?"

Multicloud cost optimization refers to the practices and strategies that can help keep those costs in check or ensure that the organization gets a greater return on investment for the amount it spends. "The real worries start when the monthly bills start to come in," Patel explained, illustrating the need to take measures that keep the bills in check.

Without cost optimization measures in place, organizations operating in the multicloud can face challenges such as compatibility issues, lack of flexibility, and sub-optimal data protection all due to poor spending diversification. Even so, multicloud strategies can enhance scalability and limit vendor lock-in situations over time.

Infrastructure Innovations That Can Help IT Teams Adapt Even When Budgets Tighten

1. Hyperconverged Infrastructure

Hyperconverged infrastructure is software that combines physical servers, storage with networking that eliminates certain pain points that are common in legacy infrastructure. This allows for a more seamless integration of on-premises data centers with public clouds to create a hybrid multicloud environment.

HCI can be a central aspect for reducing IT costs by eliminating the upfront costs of purchasing and managing separate IT components.

The Nutanix Enterprise Cloud Index surveys IT decision-makers from around the world regarding their IT infrastructure and cloud-related challenges and insights. In the 2023 ECI report, 93% of respondents asserted their intentions to have or deploy hyperconverged infrastructure within two years.

2. Unified Data Services

Incorporating unified data services into a cloud strategy is another way to facilitate multicloud cost optimization. This entails enabling cloud platform users to integrate data management capabilities on-premises, in the cloud, and at the edge, including data services for Kubernetes applications and cross-cloud data mobility.

"IT teams need to find a way to both enable their developers with self-service data services, while also ensuring governance and security policies are applied uniformly," said Thomas Cornely, Nutanix SVP of Product Management, regarding the unification of data services.

The concept of unified data services addresses a specific need for a common operations layer in the multicloud setting. With a single layer extending across multiple clouds, administrators gain comprehensive visibility and control of an entire infrastructure. This can improve security, insight into resource utilization, and control over IT infrastructure costs.

3. Hybrid Multicloud Platform-as-a-Service

Opting for a platform-as-a-service can free a company from the burden of maintaining its own cloud platform and paying the upfront expenses of building the necessary infrastructure. While this option does entail pay-as-you-go expenses, the potential benefits can fulfill the cost optimization requirements for a business with the right strategy in place.

Finding ways to manage across owned data centers and different cloud platforms is opening new opportunities for companies that build their own applications or onboard new applications to run their business. The ability to give developers tools and a place to build, trust and run new applications is essential. The notion of building cloud native applications, ones created in and for cloud environments is not limited to cloud service providers. New software is making it possible for IT leaders to provide developers with and almost "infrastructure agnostic" system so applications and data can run across different cloud-powered data centers and services.

The Platform-as-a Service (PaaS) approach also addresses the common multicloud cost optimization issue of over-provisioning cloud resources. Cloud computing enables infrastructure elasticity that allows an organization's current pool of resources to expand or shrink based on ever-changing demand circumstances, and a platform-as-a-service solution can be particularly elastic. This approach can help the enterprise keep pace with the rapidly-growing industry.

4. Cloud-to-Edge Management

Innovations in hybrid multicloud are also empowering edge computing. Centralized data center operations that connect to cloud services and remote offices can face latency and cost challenges for businesses. The ability to replicate a data center and run that same IT environment in remote locations can bring efficiencies, especially when it comes to security, application updates and other functions that can be executed in a coordinated, uniform manner.

"We will extend our hybrid multicloud platform to deliver a truly universal cloud operating model to include consistent management across public clouds, on-premises, hosted, and edge environments," said Cornerly, describing Nutanix Central.

In a distributed multicloud environment, the underlying architecture facilitates compliance, performance and edge deployments. The presence of a centralized cloud-to-edge management solution supports multicloud cost optimization in this environment by providing a seamless universal cloud operating model that breaks down silos.

According to Gartner, many organizations are evaluating a distributed cloud model as part of their cloud migration strategies for its ability to meet sovereignty, latency and network bandwidth requirements. There are cost challenges to acknowledge in choosing a model that incorporates the edge, but the right cloud-to-edge management tool meets those challenges head-on and keeps costs in a favorable state.

5. Cost Governance

Cost governance as a general term refers to an organization's initiatives toward retaining visibility over spending, reducing costs through measures such as automation, and controlling expenses by allocating resources based on observable consumption patterns. It is also a smart strategy that business leaders can follow in optimizing cloud costs at the private, public, and multicloud levels.

The Cost Governance tool on Nutanix Cloud Manager is a platform-based solution that can simplify multicloud cost optimization. Adopting this type of software solution in one's cost governance strategy yields the benefits of metered TCO calculations, automatically generated cloud consumption reports, and automated resource rightsizing.

"It is essential to monitor the cloud resource utilization and configuration on a regular basis, clean up the unused resources, and remove any storage volumes that are no longer in use," Patel pointed out on the Walmart Global Tech blog. Monitoring, as well as the actions a business takes as a result of that monitoring, is a crucial process in cost governance and cost optimization overall.

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A Platform With Multicloud Cost Optimization as a Feature

It's important to choose the right service across cloud providers in order to make the right fit to meet particular needs, explained Patel.

"The field has a lot of competitors," he wrote. "It is essential to understand the use case and specific technical requirements, various cloud providers offer more or less similar managed services for the job but evaluate each equivalent service in terms of Cost, Security, Compliance, Governance, etc."

The need for multicloud cost optimization stems from a landscape marked by unprecedented and ever-growing complexity. The smartest strategies, then, are those that bring about simplicity while distancing users from all the complex components churning under the surface.

To read more Hybrid Multicloud Cost Optimization Strategies, go to https://www.nutanix.com/products/cloud-manager

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