mware[®]

Industry

Cloud computing and platform virtualization software and services

Headquarters location

Palo Alto, California

Employees

10,000+

VMware footprint

Tanzu CloudHealth®

Key features

Cost optimization features RI management Policy engine

Clouds

AWS, Azure, Google Cloud Platform

Key benefits

- All public cloud users have complete insight into ongoing cloud spend
- Overall cloud expenditures decreased more than 30 percent
- Achieved predictable and discounted pricing through long-term cloud provider programs

VMware Regains Control and Optimizes Public Cloud Spend with VMware Tanzu CloudHealth

VMware provides cloud computing and platform virtualization software and services. They were the first commercially successful company to virtualize the x86 architecture. Today, VMware software powers the world's complex digital infrastructure. The company's various offerings provide a dynamic and efficient digital foundation to more than 500,000 customers globally, aided by an ecosystem of 75,000 partners.

The challenge

While cloud technology has revolutionized the way enterprises consume IT, there are significant challenges surrounding control and optimization of spend. As VMware started to build solutions on multiple clouds—including Amazon Web Services (AWS), Google Cloud Platform, and Microsoft Azure—these drawbacks soon emerged. The company had no visibility into what they were spending or where, and that spend was skyrocketing. Further, IT needed a platform that enabled them to be transparent to the colleague (end user) community within each of the VMware business units while bringing structure to the multi- cloud environment.

"Our experience with [Tanzu CloudHealth] has been fantastic, and the platform has enabled us to be more intelligent about what we are doing. Prior to [Tanzu CloudHealth], we had been reactionary, but we are now proactive and able to effectively manage our cloud environment in ways never before thought possible."

Anees Igbal, Senior Director of Cloud Services, VMware

The solution

The IT team's initial attempt involved consolidating all public cloud accounts under a single umbrella account, an approach that would provide decision-makers with better visibility. The challenge was that native tools such as AWS





Cost Explorer only offered insight into their own clouds; it was still near impossible to get consolidated cost data across all clouds. Similarly, it was difficult to associate that spend with key business dimensions, such as business unit and cost center.

The answer was found in Tanzu CloudHealth, a comprehensive, best-in-class dedicated platform that offers capabilities for visibility, optimization and proactive management of any type of cloud usage. Tanzu CloudHealth manages more than \$20 billion in total cloud spend across several vendors, so it offered immense knowledge and leadership right out of the box. (VMware was a customer prior to the acquisition of CloudHealth Technologies in 2018.)

The results

Unparalleled visibility

Thanks to Tanzu CloudHealth, VMware IT is now able to present business units with data that clearly outlines what they are actually spending and on what type of service, so much so the software has become the company's transparency engine. In many cases, this was an eye-opener as teams simply did not know; there was a valid perception that public cloud consumption was significantly less expensive than previous methodologies, so usage was essentially free. The software-generated information proved so effective that, today, every group from finance to engineering must employ this new approach to clean up and justify their cloud usage and spend.

Optimization following a tried and true retail business model

With a consolidated view of spend, the VMware IT team

realized they could implement a business model any warehouse club shopper knows well: Buy in bulk to save money. While public clouds offer significant flexibility, the reality was VMware paid full retail for every minute of use. Now that VMware IT knew the company's approximate cloud spend, negotiators could approach the vendors for better pricing based on volume. Public cloud providers offer discount pricing programs, commonly known as Reserved Instances (RIs), that allow enterprises to trade predictability for better pricing.

Under a typical RI program, IT agrees with the cloud provider to use a certain amount of capacity during a set period—one or three years—in exchange for a predictable, discounted price.

Unfortunately, these types of programs also have many nuances and options that make them difficult to manage. Tanzu CloudHealth adds a tremendous amount of value here, and the VMware IT team was able to pre-purchase 60 percent of their Amazon Elastic Compute Cloud (EC2) instance capacity through RI purchases. However, personnel must still continue to measure, report and optimize the RI fleet during the contract term to ensure compliance. This is accomplished by regularly buying new RIs as older purchases expire, and by exchanging RIs from one instance to another using Convertible RIs. By using Tanzu CloudHealth, teams are now able to master AWS from a 360-degree point of view instead of only select areas as before.

Proactive management made easy

Tanzu CloudHealth has a number of policy options to allow IT team members to be proactive with cloud optimization. A budget policy was implemented that would alert engineers and finance controllers when an account was nearing 80 percent of their monthly budget spend. Another policy was created to expose waste in the form of disconnected Amazon Elastic Block Store (EBS) volumes, elastic IPs and aging snapshots. In the near future, once stakeholder buy-in is achieved, an automatic cleanup option for such waste will be enabled.

Results that made an immediate impact

With Tanzu CloudHealth, the VMware IT team significantly eliminated the company's overall cloud resource waste. This effort alone reduced the company's public cloud compute cost by more than 35 percent. By exposing data, the team stabilized the growth of their public cloud spend and brought all-new levels of predictability to budgeting efforts.

