

How CloudHealth Enabled VMware to *Regain Control* and Optimize Public Cloud Spend

VMWARE, A SUBSIDIARY OF DELL TECHNOLOGIES, PROVIDES CLOUD COMPUTING AND PLATFORM VIRTUALIZATION SOFTWARE AND SERVICES. It was 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 (GCP), 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 multicloud environment.

BUSINESS BENEFITS:

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

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 like business unit, cost center, etc.

The answer was found in CloudHealth, a comprehensive, best-in-class dedicated platform that offers all-new capabilities for visibility, optimization, and proactive management of any type of cloud usage. CloudHealth manages more than \$8 billion in total cloud spend across several vendors, so it offered immense knowledge and leadership right out of the box.

THE RESULTS

UNPARALLELED VISIBILITY

Thanks to CloudHealth, 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 IT team realized they could implement a business model any warehouse club shopper knows well—buy in bulk to save money. While the public clouds offer significant flexibility, the reality was VMware paid 'full retail' for every minute of use. Now that 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.

“Our experience with CloudHealth has been fantastic...and the platform has enabled us to be more intelligent about what we are doing. Prior to 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 IQBAL

Senior Director of Cloud Services,
VMware

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. CloudHealth adds a tremendous amount of value here, and the VMware IT team was able to pre-purchase 60% of their Amazon 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 employing CloudHealth, teams are now able to master AWS from a 360-degree point of view instead of just select areas as before.

PROACTIVE MANAGEMENT MADE EASY

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