Cloud Cost Management & Optimization

When it comes to tracking Cloud costs and managing Cloud consumption, companies have to choose between using built-in tools from their Cloud Service Provider (CSP) or leveraging a 3rd party solution. And while many Cloud Management Platforms exist today, the reality is that they are simply features of what a fully-operational Cloud Management Platform should be.

Cloud Service Providers (CSPs) are like utilities companies—they provide an inexpensive commodity but won't manage your spend

Cloud Computing is a $300B industry and CSPs like Amazon Web Services (AWS) and Microsoft (Azure) have made a lucrative business out of selling companies Cloud infrastructure. Software and services that help IT organizations save money by hosting their workloads and applications in the Cloud vs. on premises are included in their infrastructure offering. With by-the-hour pricing schemes (or in some cases, by-the-minute), CSPs capitalize on making their products and services appear to be a small expense to those that consume them. Who wouldn't pay a few cents an hour for infrastructure when the alternative (expensive on-premises data centers) is substantially more expensive? On the surface, Cloud technologies are a financially viable solution...but only if organizations that consume these resources manage them on their own.

Most IT workloads are not run at full capacity 24x7. Meaning, there are natural down cycles for IT infrastructure. Companies with on-premises IT infrastructure were stuck managing their data centers on their own because they bought, installed, and operated them. With Cloud Computing, you pay for what you need—when you need it—and then you give back unused resources when they're longer needed. Organizations that consume Cloud technologies have seen significant cost savings by paying only for what they use, but many have fallen short when it comes to giving back unused Cloud resources.

Cloud Service Providers make it easy to buy, but not to return

Scheduling Cloud infrastructure and decommissioning it when it's no longer needed should be as simple as turning on and off a light switch. Unfortunately, that isn't the case. Your utilities company doesn't care if you left the lights on at home while you were on vacation. They're happy to bill you at the end of each month even if you weren't there to enjoy the use of their services.

There are several complexities when it comes to parking Cloud workloads and organizations are left with more questions than capabilities. *What resources can I shut down in my off hours? What if I need a different schedule from day to day? What if I can't shut down my entire workload?* Finding the right solution to waste elimination comes down to two options: Self-service cost and resource control through built-in tools provided by the CSP or leveraging a third-party solution that can do it for you.

Cost analysis is just about the bill, not your organization

Most CSPs like AWS and Azure provide some basic cost analysis functionality that allows their customers to slice and dice their invoice so that they can see how much they are spending on their CSPs services. Beyond this simple breakdown of services cost, there isn't much more analysis they can—or will—provide. And when it comes to recommendations on how to optimize Cloud usage, companies are left totally in the dark.

When aggregating Cloud costs arbitrarily—by business unit or cost center, for example— or grouping costs from one account with those from another account, companies are turning to third-party applications to help them with the task.

Not all third-party solutions are created equal

Companies that require more reporting and analysis than what their CSPs offer have turned to third-party solutions to help them better manage their Cloud costs. The popularity of Cloud Management Platforms (CMPs) has risen significantly in the last few years as more and more organizations recognize the need to report, analyze, and optimize their cloud spend in order for their move to Cloud infrastructure to remain a cost-saving measure.

CMPs and the reporting tools they offer have been around for a long time. Companies like CloudHealth by vmWare, Cloudability, Cloudcheckr, and Finance Manager, have gained traction in the CMP marketplace with their ability to produce pretty charts and graphs and help organizations allocate costs for charge backs or show backs. These tools also make it easy for organizations to see the areas in which they can save the most money—typically, cost savings are found by eliminating waste in the platform.

But that is where their capabilities end. Most CMPs are simply a SaaS tool and are not operational platforms. You, the account owner, will still have to do the work in order to see the savings. While a typical CMP will show you which resources to turn off/on, or where scheduling your resources for uptime and downtime can save you money, it is up to the account owners to find a way to schedule their Cloud workloads, delete resources that are no longer needed, or right-size their infrastructure. These are typically manual tasks that can take time away from more important business objectives like building your application.

Don't let tools manage your Cloud

With the rise in adoption of Cloud Computing, organizations are migrating the majority—if not all—of their business-critical workloads and applications to the Cloud. And as their Cloud spend grows, these companies are demanding more from their CMPs than just pretty charts and graphs. In order to fully optimize their Cloud infrastructure with ease, and control Cloud costs through automation, consumers of Cloud technologies require a solution with built-in capabilities that allow them to take operational actions across all of their workloads. Actions like parking, timed instances, scheduling, and Pen Testing that are available directly from their CMP's platform as one-click optimization functions that help them reap the most cost-saving benefits from their Cloud investments. When evaluating a Cloud Management Provider, it is imperative for organizations to choose a CMP that is fully-operational and allows users to take action on recommendations instead of allowing tools to "manage" their Cloud.