

MULTI-CLOUD BEST PRACTICES: HOW IT OPS CAN CHAMPION



Clouds—A playing field for innovation

For years, we've been innovating with cloud technologies. Within minutes we spin up infrastructure that is publicly accessible to users across the globe for just about any web-based application or service.

The promise of agility and lower cost drives many innovators to self-provision cloud resources instead of going through the dedicated IT operations processes in place. Upper management often drives innovation and rewards this behavior when it goes well. When IT operations processes are left by the wayside though, what's the risk?

My cloud story

For my role in technical marketing at BMC, I need to have environments to test and demo our solutions as they are being released more frequently—and *in some cases*—continuously. We have a dedicated team that can spin up infrastructure to support this. However, for one of my smaller projects, having to go through that process did not seem as efficient as using Amazon Web Services (AWS) or Microsoft Azure. I was able to start my project right away at no initial cost. I also had a hunch that as it got underway and incurred expenses, it would be at a lower cost overall for the company. We ultimately used my team member's corporate credit card to submit for expenses.

What's to lose?

At any large company, a lot of other folks are probably doing the *same thing* and going directly to a public cloud for a relatively small amount of resources. This can generate large surprises with material consequences. I must admit that in my case, there were times that I did not check on the state of my running instances. I had stuff consuming data and resources in the cloud that was not necessary, especially after trade shows were over. Stay tuned for a future post on how we are managing this companywide to enable fast access to resources while controlling costs.

For today, let's consider how IT Operations can champion innovation like this on the edges within the management and oversight of infrastructure and operations (I/O).

IT Operations as multi-cloud champion

Some innovators might argue that IT Operations might not be best suited to champion multi-cloud initiatives inspired by innovation. Before weighing in on the discussion, consider what championing would mean in a multi-cloud playing field and then be the judge. Here are just a few ways that IT Operations can help:

- **Planning**—IT Operations can have a companywide view of all the cloud resources being utilized, or planned for utilization, along with their associated costs. In a best case, they would be able to simulate usage from various deployment options. The options could include virtualization on premises, or private cloud, or public cloud. This data would then inform decisions and align resources with business goals instead of just following hunches. This information might help prevent folks like me from going out on our own. Partnering with IT Operations and getting these more responsive insights helps us make better decisions.
- **Optimization**—With central IT Operations as the referee or overseer of cloud resources, infrastructure can be optimized to fit the workload. Without jeopardizing performance, idle and

underutilized infrastructure can be discovered by IT Operations oversight then redirected towards other projects that need resources or have a higher priority. With the ability to programmatically control virtualized infrastructure hosted in the cloud—*again from a central location*—workloads can be dynamically shifted to available infrastructure in real time.

- **Monitoring**—This gets complicated if you have an assortment of monitoring tools all over the place and then you add multi-cloud sources. Services and apps running in the cloud often include some form of native monitoring. Normalizing this monitoring across a consistent platform has great benefits. The data that is used and shared across teams becomes a trusted standard. With everyone using the same platform of data, there's a reduction in complexity that makes it easier to prioritize and address issues faster.

When IT Operations has a complete view of cloud adopted resources across the organization, finding that sweet spot of just enough infrastructure to run workloads while not compromising performance is much easier to achieve.

What's next?

Consider how multi-cloud strategies have changed the way organizations are doing business compared to the past, even five years ago. Some of the innovation that was introduced then is now part of core IT. This balance of innovation on the edges with central IT Operations as the champion of these initiatives will make a huge difference, particularly with multi-cloud players competing for business in a fast-paced digital environment.