

As enterprises across the world adjust

to accommodate the surge of remote workers, ensuring adequate IT capacity becomes even more critical. And while it is indeed critical to ensure there are sufficient IT resources available to run the business, it is equally critical not to overprovision and have wasted, unused, or underused resources consuming IT budget dollars.

A recent IDG survey of 150 IT decision makers across the U.S., U.K., Germany, and France revealed a majority of those respondents (86%) find it "very challenging" or "extremely challenging" to optimize their IT resource capacity to adequately meet changing business demands. Survey respondents cited the following factors as their top challenges:

- An inability to scale IT services to meet demand (53%)
- **Difficulty predicting capacity** required to meet peak demand (47%)
- Lack of visibility into resource usage and cost (47%)

There are two primary factors that add to the challenges of accurately and efficiently optimizing IT resource capacity, said Dennis Newberry, product manager at BMC.

"One is that there is technology disruption that's occurring where companies are moving to more modern technologies—like cloud, Kubernetes, containers, and so on—from legacy technologies," he said. "The other factor is organizational disruption. Over the last several years, there is more development being done within the lines of business and not within centralized IT. Where your long-term planning functions and infrastructure optimization occurred in IT, now it is happening outside of that core function."

That amplifies the challenge of obtaining comprehensive visibility into those environments, Newberry continued.

"Gaining visibility into those environments is now more difficult because you have to work across a larger organization," he said.

Most of the survey respondents (76%) are using a combination of cloud-based and on-premises solutions for managing IT capacity, as opposed to specific on-premises (12%) or solely cloud-based solutions (11%). Similarly, most respondents (63%) are also using both on-premises and cloud-based solutions to manage their IT costs.

And this appears to be an effective approach. Since deploying their capacity management solutions, most of the survey respondents have seen an average 36% reduction in IT capacity usage while supporting the same workload levels.

There is room for improvement, however. Survey respondents were quite clear in what they're looking for in their IT capacity and cost management solutions. Respondents cited:

- Better visibility into potential issues or disruptions (48%)
- Improvements in IT efficiency (48%)
- Better ability to predict resource saturation levels (44%)

Ultimately, ensuring and optimizing the right balance of IT resources comes down to a risk/reward equation.





"How do you manage that balance? I can increase my costs and lower my risk by overprovisioning my environment so I'll never have a performance-related outage," said Newberry. "Conversely, if I want to reduce costs, I could run the potential of having a performance-related issue. So ultimately you're trying to find the right balance and then maintain that balance."

The IDG survey revealed how cost-management solutions can help respondents maintain and manage that balance. Survey respondents indicated the top benefits of their current IT cost-management solutions are:

- Improved clarity around billing to help proactively manage resource costs (71%)
- **Reduced risk** during cloud migration as a result of better-informed decision-making processes (71%)
- Measurable improvements in IT efficiency (55%)

A majority of respondents also reported that using cloud-based IT cost-management solutions helped reduce cloud service provider costs by an average of 32%. Moreover, it can be easier to manage cloud-based assets than physical assets.

"I actually think it's easier to get visibility into the cloud," said Newberry. Asset inventory and management in traditional, physical infrastructure often requires deploying and managing agents. "The challenge then becomes how do you bring those two [views] together," he added.

Strive for Efficiency

When it comes to best practices for ensuring resource optimization, it comes down to what Newberry calls "the three Rs."

"The first is 'reclaiming' waste," he said. "So look for overprovisioned VMs, idle VMs, or unattached storage volumes. If you did that alone, you'd save a lot of money. The second R is 'rightsizing.' You have to be really looking to optimize the workload to the resource. Make sure you're matching the demand to the resources you're allocating to that demand. And the third R is making 'reservations' and allocating resources at the time of the project, instead of pre-allocating way in advance."

Organizations also have several pitfalls to avoid.

"Over-provisioning is one of them," Newberry said. "And while this may sound dated, organizational governance around optimization is still a problem. You need visibility into all your infrastructure and applications."



Deploying a cloud-based IT resource management solution can help resolve these issues. Survey respondents cited the following advantages of doing so:

- The ability to reserve IT resources for new applications and services when needed (69%)
- Access to Al-fueled insights to better predict resource capacity usage and potential savings (54%)
- **Scalability**—the ability to easily contract or expand deployment (47%)

Organizations that have deployed BMC Helix Capacity
Optimization have achieved visibility into their entire IT
infrastructure—including the physical and virtual components, containers, and cloud platforms. With this level of visibility, IT can adjust compute, storage, network, and other IT infrastructure resources to meet evolving application and service demands. When it comes to specifically adjusting on-premises resource capacity, a solution like BMC TrueSight Capacity Optimization is more suitable.

BMC Helix Cloud Cost provides visibility and helps control cloud costs, using machine learning and automated recommendations and actions. It can help organizations maintain optimal cloud resources and reduce waste and costs. And ensuring consistent and sufficient capacity while managing costs is the ultimate goal for the modern enterprise.

To learn more about optimizing IT resource capacity, go here.