

PLANNING, DUE DILIGENCE LEAD TO SOLID CLOUD CHOICES



CRITICAL ADVICE FOR PICKING A CLOUD PARTNER, DESIGNING SUCCESSFUL STRATEGY

We've reached a significant cloud tipping point: Cloud is now the default choice for forward-looking organizations. Writes [Bernard Golden](#), "More important, the IT disciplines that accompany application design and operation are now cloud-centric."

And because of the flexible nature of the cloud, increased adoption has meant multiple cloud instances, multiple vendors, and multiple challenges. Despite those challenges, Golden says "cloud has won the hearts and minds of IT users. The significance of this tipping point is profound."

We asked a dozen cloud practitioners and experts what advice they have for their peers navigating the multi-cloud world we live in.

"IT IS A TOOL JUST LIKE ANY OTHER. THINK ABOUT BUSINESS OUTCOMES AND FOCUS ON THOSE AS YOUR COMPASS WITH DECISIONS AROUND CLOUD."

TIM CRAWFORD :: CIO STRATEGIC ADVISOR, AVOA

On the road to cloud adoption, IT leaders face a host of critical choices: which vendor, which workloads, what data, what about security ... the list goes on. The key to making informed choices is planning and strategy.

"The most important thing when adopting a multi-cloud environment is [to] have a well-planned strategy," says [Rick Blaisdell](#), cloud computing expert.

Says [Diana Nolting](#), product analyst at Bluelock, "Take a strategic approach to implementing a multi-cloud environment for your business, allowing each workload to run in its best-fit environment based on its risk profile, business demands, and security and compliance considerations—all while maintaining visibility and connectivity to the rest of the environment."

Nolting recommends a big role for business in this process. "Empower your business units to choose the right cloud option, in support of the strategic vision and overall business resiliency picture, not in the shadows of it. Understand the business needs and let IT be a strategic adviser and partner by playing a vital role in making those choices."

PICKING A PARTNER

Once your strategy is in place, start thinking about vendors. As [Michael Sheehan](#), senior manager of content marketing at Riverbed Technology, says, "Don't go it alone."

Sheehan urges: "Do your due diligence. Understand the cloud providers and their capabilities. Know what they can and cannot do. Ask the hard questions. Think a year beyond the actual implementations to be sure your providers can scale. And dive deep into the standards (or lack thereof) and integration capabilities for interoperability."

"Multi- and hybrid cloud is inevitable, and you should treat it as such," says [Eric Leach](#), VP, product management, at Apcera. "Security models and management tools are going to be different in each cloud, so choose solutions that help reduce that complexity and keep retraining costs as low as possible."

Digging into the partner decision, [Jeff Kaplan](#), managing director of THINKstrategies Inc., emphasizes these three considerations:

"First, match specific workloads to the appropriate cloud service. Second, test the cloud service availability and response time performance before making a major commitment to the service provider. Third, fully understand how the cloud service provider will make you aware of service disruptions and the status of their restoration efforts."

[Lori MacVittie](#), principal technical evangelist at F5 Networks, offers this advice to help keep it simple: "Wherever possible, use the same services across clouds to avoid inconsistency in implementation and operational challenges in managing them."

To that end, [Ed Featherston](#), VP and principal architect at Cloud Technology Partners, recommends, "Do a single cloud vendor first; make sure you and your organization are ready for the change in culture and process that comes with cloud."

Keep your eyes on the prize, advises [Tim Crawford](#), CIO strategic advisor at AVOA. "Do not be 'wooned' by the shiny object when it comes to cloud. Consider your needs and which provider(s) align strategically, not necessarily with simply features available today."

When ready, Crawford says, "Choose the right, smallest number of providers. Everyone will leverage multiple cloud providers for software, platform and infrastructure as a service. As you move from SaaS to IaaS, the number of providers should move to one—or close to one."

SUCCESS IS IN THE DETAILS

"Know your own environment. Do you have legacy networks, infrastructures, or applications that must be supported?" asks Riverbed's [Sheehan](#). "Can applications be refactored or reworked to truly use cloud capabilities? Do you have a clear plan for future upgrades and build-outs? Do you have a cross-functional team representing all of the internal customers/groups so that all aspects of a build-out can be addressed?"

What about the applications themselves? [Theo Lynn](#), professor of digital business at DCU Business School, says, "Enterprises need to pay a lot more attention to the detail in migration planning generally and multi-cloud specifically."

Lynn continues, "Once a solution has been identified, our research recommends a robust migration plan needs to be developed that reorganizes multitier applications into disjoint groups of service components, such that each group can be deployed separately in different platforms [i.e., cloud platforms, on-premise platforms]

while preserving, and in most cases enhancing, the desired properties of the application."

Sometimes, a cloud deployment is the best time to bake in security, says [Kayne McGladrey](#), director of information security services at Integral Partners.

"Build your multi-cloud solution as though it has to be externally audited for compliance with your least-favorite compliance standard. This forces organizations to build from a baseline of security, rather than adding security as an afterthought or as a reactionary measure. Regularly test breach scenarios of individual end users, service accounts, and shared secrets before the bad guys do."

Technical writer [Will Kelly](#) echoes the security advice: "Involve your cybersecurity team early to set up proactive monitoring and other security measures to secure your multi-cloud environment."

ROI, FINANCES, AND SLAS

Kelly advocates "Bring your accounting team in early to ensure you get the billing, accounting, and procurement issues ironed out at the beginning of the project."

Lynn adds, "Prior to a multi-cloud deployment, an ex ante and robust return-on-investment [analysis] needs to be done that compares with the existing provisioning, and alternatives including alternatives to the cloud and alternatives within the cloud."

This ROI analysis needs to include "strategic, operational, and technical aspects and not merely [be] a TCO or direct cost comparison."

Many of those details can be covered in your SLA. Says Lynn, "When negotiating and planning a multi-cloud deployment, care needs to be taken to align SLAs and pricing so that ongoing iterative decisions can be made in an informed way so that ex post and ongoing ROI targets are met."

VISIBILITY IS KEY

"When embracing multiple clouds as a business it's much easier to lose control and visibility of the entire environment than it is [to] maintain it," cautions Nolting. "What's evolving today isn't the concept of multi-cloud for business, it's the strategy behind multiple clouds; the idea that a business can embrace leveraging multiple, connected clouds of different types to the advantage of the user experience and the corporate bottom line."

Says F5's MacVittie, "Visibility is key. Keeping track of all the various components of your cloud-based apps is not only critical in containing costs, but imperative in eliminating the security risks inherent in unmanaged [forgotten] resources."

Blaisdell says a high-level view of existing infrastructure helps. "Map your entire network and discover where exactly your cloud fits in it. You might find out that some of your business lines will be better served by different cloud providers."

He adds, "Automate low-level monitoring and maintenance assignments. Automation is the answer if you want to get the most out of your multi-cloud environment. And adopt an integrated data center management system, which is designed for virtual environments. This will enhance the collaboration among your network, server, storage, operations, and applications teams."

WORDS TO THE WISE

There is no "cloud" button. Getting to cloud takes planning and diligence.

"Expect challenges, failures, learn from them, and move forward," says Featherston.

And cloud is not a panacea. "It is a tool just like any other," says Crawford. "Think about business outcomes and focus on those as your compass with decisions around cloud."

There's a lot at stake. Writes Golden, "Any IT leader worth his or her salt [who] hasn't got a high-priority all-in cloud plan, who is satisfied with a go-slow hybrid approach, who lets keeping a happy workforce take priority over moving faster, is a failure. Don't let that failure be you."