Auto Casualty

How Enterprise Companies Are Choosing the Right Hybrid Cloud Architecture

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4 MIN READ

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IDC predicts that more than 80 percent of enterprise IT organizations will commit to hybrid cloud architectures by 2017. And it's recently been reported that Uber, the ride-hailing app, is moving in that direction. According to Business Insider, Uber is soliciting bids from Google, Microsoft, and Amazon in order to move some parts of its code to the cloud. Uber currently operates in 69 regions, and in a business where customer experience is highly dependent on the speed of interaction, it makes sense for them to house relevant workloads as close to the action as possible. Yet, earlier this year, Dropbox took a huge step in the other direction. They've moved 90 percent of their files (and yours, if you're one of the 500 million Dropbox users) off Amazon Web Services (AWS) and onto their own private, purpose-built storage. Although Amazon's cloud offering allowed Dropbox to scale quickly, they reached a point at which they figured they would be better served by bringing these workloads in-house and built their own infrastructure for this purpose. They reportedly developed a unique programming language to build a solution that enables them to customize storage, increase speed and reduce costs. They even built their own hardware, an increasing trend on its own—Google, Facebook and Twitter have all gone down this path to varying degrees. So why are these two technology powerhouses moving in such different directions? In my view, they're not. Both of these companies are looking at how cloud technologies—public and private—best serve their customers, businesses, and their bottom lines, and making thoughtful, responsible choices about how they use them. Both companies are embracing hybrid solutions.

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Determining the right mix: public, private, on premises or co-located

Dropbox's commitment to building their own infrastructure appears to support the idea that at a certain scale, some companies may see diminishing returns from operating fully on a public cloud. The Uber example on the other hand, may be a case where the benefits of the public cloud are too good to dismiss, both from a business

and a customer experience perspective. Either way, both choices set a great example for how technology leaders can make responsible decisions as to what the right mix is of public/private cloud for their companies. Here's the thing: as technology leaders, CIOs and CTOs play a complex and critical role in their businesses. They are challenged to be technology visionaries, to foster innovation and to help create an engaged and effective workforce. And they must do all this while also keeping pace with advances in technologies and evolving modern infrastructure that supports their company's strategy and objectives.

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It's easy to get caught up in emerging trends, without fully considering the impact that each initiative and its implementation will have on the business as a whole. When it comes to cloud technologies, some companies may be tempted to go all in. However, as I've said before, there are challenges that must be considered to ensure a responsible migration path and a successful technology adoption.

Key considerations

Each company's journey is unique, as are the factors that drive their decisions. Understanding total cost of ownership and return on investment are top priority, and they're both difficult to quantify. Data usage costs labor and equipment costs, and Capex vs. Opex consideration all play a significant part. It's even more difficult to quantify intangibles like elasticity, the ability to scale-on-demand and the benefits of high availability at peak usage times. Another huge consideration: the complexity of re-architecting a technology stack—determining what workloads are best housed on public vs. private cloud infrastructure and whether there are workloads that are simply not worth addressing at all. Actually migrating workloads, with no disruption to business-as-usual is yet another factor that must be accounted for. Customers and their comfort level with new technologies also play an important role—they must be brought along in the journey and have confidence that their software will be available and their data will be safe. For well-established enterprise SaaS companies like Mitchell, getting this mix right, determining the costs vs. benefits, and mapping out this transition over time, are especially critical as we join the inevitable march toward cloud architecture—and these are considerations I will keep in mind as Mitchell explores this transition.