It’s Called Cloud Computing not Cheap Computing

Lori MacVittie, 2010-06-12

The debate between private and public cloud is ridiculous and we shouldn't even be having it in the first place.

There's a growing sector of the "cloud" market that is mobilizing to "discredit" private cloud. That ulterior motives exist behind this effort is certain (as followers of the movement would similarly claim regarding those who continue to support the private cloud) and these will certainly vary based on whom may be leading the charge at any given moment.

Reality is, however, that enterprises are going to build "cloud-like" architectural models whether the movement succeeds or not. While folks like Phil Wainewright can patiently point out that public clouds are less expensive and have a better TCO than any so-called private cloud implementation, he and others miss that it isn't necessarily about raw dollars. It's about a relationship between costs and benefits and risks, and analysis of the cost-risk-benefit relationship cannot be performed in a generalized, abstract manner. Such *business* analysis requires careful consideration of, well, the *business* and its needs – and that can't be extrapolated and turned into a generalized formula without a lot of fine print, disclaimers, and caveats.

But let's assume for a moment that no matter what the real cost-benefit analysis of private cloud versus public cloud might be for an organization that public cloud is less expensive.

So what?

If price were the only factor in IT acquisitions then a whole lot of us would be out of a job. Face it, just because a cheaper alternative to "leading brand X" exists does not mean that organizations buy into them (and vice-versa). Organizations have requirements for functionality, support, compliance with government and industry regulations and standards; they have an architecture into which such solutions must fit and integrate, interoperate and collaborate; they have needs that are both operational and business that must be balanced against costs.

Did you buy a Yugo instead of that BMW? No? Why not? The Yugo was certainly cheaper, after all, and that's what counts, right?

IT organizations are no different. Do they want to lower their costs? Heck yeah. Do they want to do it at the expense of their business and operational requirements? Heck no. IT acquisition is always a balancing act and while there's certainly an upper bounds for pricing it isn't necessarily the deciding factor nor is it always a deal breaker.

It's about the value of the solution for the cost. In some infrastructure that's about performance and port density. In other it's about features and flexibility. In still others it's how well supported it is by *other* application infrastructure. The value of public cloud right now is in cheap compute and storage resources. For some organizations that's enough, for others, it's barely breaking the surface. The value of cloud is in its ability to orchestrate – to automatically manage resources according to business and operational needs. Those needs are unique to each organization and thus the cost-benefit-risk analysis of public versus private cloud must also be unique. Unilaterally declaring either public or private a "better value" is ludicrous unless you've factored in all the variables in the equation.

ORGANIZATIONS are not GREENFIELDS

I will, however, grant that public cloud computing offerings are almost certainly cheaper **resources** than private. But let's look at the cost to integrate public cloud-deployed applications with enterprise infrastructure and supporting architectural components versus a private cloud integration effort.

Applications deployed out in the cloud still require things like application access control (a.k.a. ID management), and data stores, and remote access and analytics and monitoring and, well, you get the picture. Organizations have two options if they aren't moving the entirety of their data center to the public cloud environment:

1. **DUPLICATION** Organizations can replicate the infrastructure and supporting components necessary in the public cloud. Additional costs are incurred to synchronize, license, secure, and manage.
2. **INTEGRATION** Organizations can simply integrate and leverage existing corporate-bound infrastructure through traditional means or they can acquire emerging "cloud" integration solutions. The former is going to require effort around ensuring security and performance of that connection (don't want requests timing out on users, that's bad for productivity) and the latter will incur capital (and ongoing operational) expenses.

Integration of public cloud-deployed applications with network and application infrastructure is going to happen because very few organizations are "green fields". That means the organization has existing applications and organization processes and policies that must be integrated, followed, and adhered to by any new application. Applications are not silos, they are not islands, they are not the cheese that stands alone at the end of the childhood game. And because organizations are not green fields, the expense of fork-lifting an entire data center architecture and depositing it in a public cloud – which would be necessary to alleviate the additional costs in effort and solutions associated with cross-internet integration – is far greater than the "benefit" of cheaper **resources**.

Andi Mann 🌐 said it so well in a recent blog "Public Cloud Computing is NOT For Everyone":

> " Public cloud might be logical for most smaller businesses, new businesses, or new applications like Netflix' streaming video service, but for large enterprises, completely abandoning many millions of dollars of paid-for equipment, and an immeasurable amount of process and skill investment, is frequently unjustifiable. As much as they might want to get rid of internal IT, for large enterprises especially, it simply will not make sense – financially, or to the business.

Whether pundits and experts continue to disparage efforts by enterprise organizations will not change the reality that they are building such architectural models in their own data centers today. If the results are not as efficient, or as cheap, or as "cloudy" as a public cloud, well, as long as it offers the business and IT organization value and benefits over what they had, does it matter if it's not "perfect" or as "inexpensive" if it provides value?

The constant "put down" of private cloud and organizations actively seeking to implement them is as bad as the constant excuse of security (or lack thereof) in public cloud as a means to avoid *them*. Public and private cloud computing both aim to reduce costs and increase flexibility and operational efficiency of IT organizations. If that means all public, all private, or some mix of the two then that's what it takes.

That's why I'm convinced that hybrid (sorry Randy) cloud computing will, in the end, be the preferred – or perhaps default - architectural model. There are applications for which public cloud computing makes sense in every organization, and applications for which private cloud computing makes sense. And then there are those applications for which cloud computing of any kind makes *no* sense.

Flexibility and agility is about **choice**; it's about "personalization" of architectures and implementations for IT organizations such that they can build out a data center that meets the needs of the business they support. If you aren't enabling that flexibility and choice, then you're part of the problem, not the solution.

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