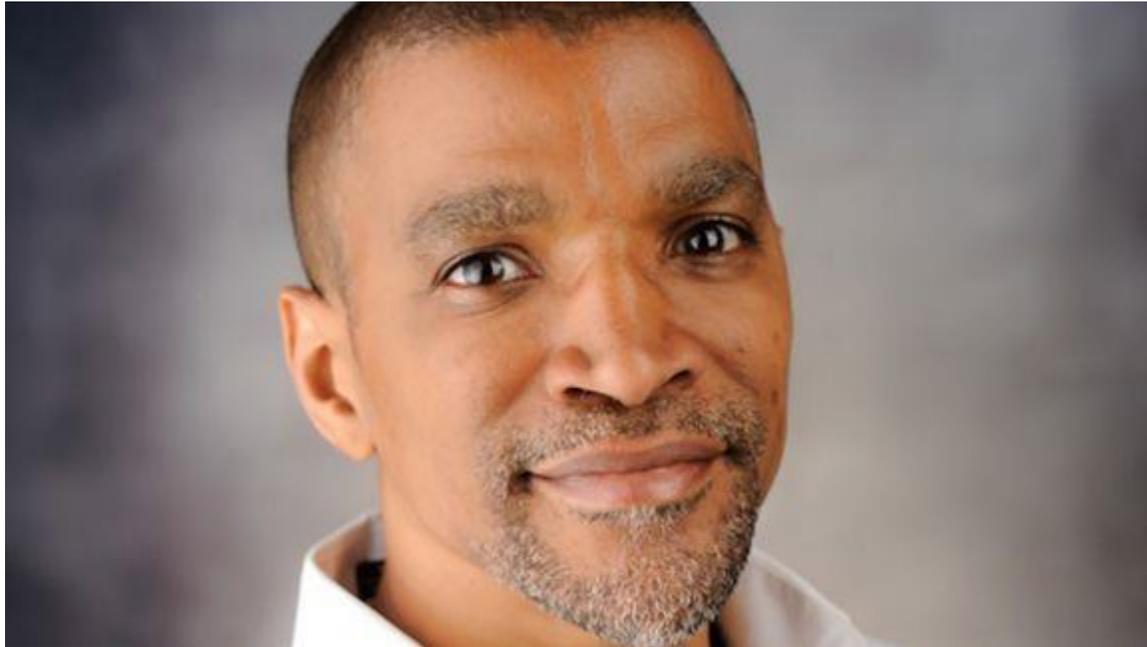


# Public cloud vs. private cloud: 8 factors (beyond cost) to consider

**INDUSTRY VOICE** What you need to know

By [Peter Harrison](#) 3h ago



Peter Harrison, Colovore

As companies continue their pursuit of the cloud, they must face an existential IT question: should I own or lease my infrastructure? Put differently, as I move my IT capabilities to the cloud, should that cloud be private or public?

At its most basic, this is the classic build vs. buy decision. Those who want more control can build (i.e., private cloud), and those that want to optimize for cost can buy (i.e., public cloud). But, the IT industry as a whole has been going through some fundamental changes that make this decision less straightforward than it would seem. Fueled by technological advances and changes in infrastructure deployment models, the price gap between public and private cloud offerings is not as large as you probably think.

In fact, the break-even point at which private cloud becomes more cost-effective than public cloud can occur at as few as 17 Amazon EC2 instances. So, if cost is not the determining factor it once was, what other factors should weigh into the decision of public vs. private cloud? Here are the top eight factors you should consider before selecting a cloud platform:

## 1. Speed of scalability

Most people are conditioned to evaluate how a particular solution scales in absolute terms. Demand, however, is neither uniform nor constant. It fluctuates as the business moves through its normal cadence. Accordingly, applications must be scalable to keep pace.

Depending on your business, changes in scale might happen diurnally as employees sign on or go home, or they might happen seasonally as customer demand peaks around specific times of year (at tax time or during the holiday season, for example). Based on the natural rhythms of your business, you must determine the speed at which you must be able to adjust to scale. If scaling requirements are predictable, private cloud might make sense, whereas rapid expansion and contraction might favor public cloud.

## **2. Tooling**

Next consider the types of IT tools required for your business. Here there are two considerations. First, what specific tools do you use and how transferrable are they between public and private cloud environments? Second, to what extent do your tools work together as part of your business workflows?

For the former, a stable of standard tools lends itself well to public cloud deployments, whereas more sophisticated tools (like those required for compliance or SLA governance) might require more control over your infrastructure. And where your business processes require integration of tools (as with common workflows), you need to consider whether your toolbox can function in a public cloud environment.

## **3. Data security**

Consider your data security posture if your business applications make heavy use of sensitive data. If maintaining strict control over data is a requirement for your business, there are negative implications of moving your infrastructure to a public cloud environment. Additionally, consider how you can meet auditing and compliance requirements in both public and private cloud scenarios.

## **4. Budgetary control**

One of the central tenets of the cloud is the notion of resource elasticity. As you need more or less resources, you can dial up or down what is used. In public clouds, this also means you only pay for what you use. If utilization is predictable, using a public cloud can be an effective way to manage costs. If utilization is subject to spikes in demand, consider how these spikes will be managed from a budget perspective. It could be that a private cloud offers budgetary insulation and finer-grained control.

There are also the corporate policy aspects of budgetary controls to consider. Initial public cloud deployments frequently have ad hoc decentralized control with the expense covered by individuals' corporate credit cards. In this scenario the total cost can be unintentionally hidden from management purview as a general and administrative expense.

For example, IT costs can be inadvertently overlooked as being in the travel or entertainment bucket in the manager's eye. Private cloud expenses usually fall under a more traditional IT related budget, with much greater scrutiny and traditional strategic alignment. Matching the cloud business need to the budget type must be considered.

## **5. Operational procedures**

The processes that drive the business are frequently dependent on how infrastructure is hosted. For example, if your operating model relies on role-based permissions, be aware of how this impacts deployments across private and public infrastructure that might rely on different equipment with varying capabilities. Similarly, are

there workflows or approval chains that must be changed to accommodate public or private cloud? Consider the effort required to construct, document, and train personnel on any new or different operating procedures.

## **6. Competitive pressure**

Does your competitive environment place emphasis on a particular axis like agility or pricing? Consider the benefits and obstacles that both public and private cloud provide and their impact on your ability to compete. Failing to consider how your business will evolve in a particular deployment model could leave you exposed. Migrating from one to the other can frequently be prohibitively time-consuming.

## **7. Impact of contracts**

Operating at scale in a public cloud environment frequently involves contracts, and as with all contracts, they come with payment terms and a contract length. If your business is growing or changing rapidly, signing binding contracts for lengthy terms can impact your ability to rapidly adjust.

## **8. Training and hiring**

It's also important to consider the uniqueness of your infrastructure environment. Electing to go with a private or public cloud option can impact the complexity of your environment, which will have a downstream impact on your ability to find and retain qualified personnel. The more unique the task, the more challenging it is to find someone that is capable of handling it. Consider how your selection of public or private cloud will help or hinder your growth in the long run.

Planning for cloud adoption or even cloud evolution requires a good hard look at cost, but cost comes in many forms and is only the first step. Leaders and architects need to be mindful about these eight other factors, because they can either propel or cripple a company depending on how well they are accounted for.

*Peter Harrison is CTO of [Colovore](#). Original article can be found [here](#).*