



The 7 vaults of cloud TCO

When considering any new financial undertaking, you need to conduct a comparison between what you are already spending and what you will spend. In most financial comparisons, you can look at previous patterns to predict future costs or options...

But because the cloud is a pay-as-you-go model, much of your financial future is predicted for you. This means your method of comparing future costs has to change completely to reflect the factors the monthly cost of your cloud computing solution inherently provides, like RAM, Disk, licensing, support by qualified personnel, redundancy, scale for future needs, and disaster recovery to name a few. A lot of these factors are surprises that await you when buying, managing, and administering IT on your own.

That said, you need to know how to effectively compare the Total Cost of Ownership (TCO) of your cloud solution against the TCO of deploying premise technology. We call this your projected path TCO.

For an accurate prediction, you'll need some perspective of how you did things in the past, honest input from your team on what it will take to do a better job in the future, and some flexibility to account for the things you might miss in your prediction.

The vaults

To simplify this, Evolve IP put together a process that helps organizations better predict and account for their true costs. These are the seven vaults of TCO expense. Each vault explores a different aspect of TCO, and each is locked because determining your TCO will take time and input from many areas to measure each properly. But if you are able to unlock each vault, you will find your accurate TCO, which will help define the outcome of your decision.

If you are able to unlock each vault, you will find your accurate TCO

To find this path, take the monthly cost of your cloud service and multiply that by the time period you plan to measure. Then, as mentioned above, compare that to the cost of the technology you plan to purchase and operate on your own in the future.

TCO Vault #1:

Physical data center/hardware

This is seemingly the easiest to unlock because it relates to quantifying your obvious costs. Work with a vendor to get a quote for all physical elements you need to operate your own data center. This can include servers, RAM, processors, disk, network switches, firewalls, cables, racks, etc.

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If you add up the hardware costs and divide them by the period you plan to measure your TCO – let's say five years – you have your cost. Some other things that are often overlooked and need to be considered in this vault are: capacity (both too much or too little), technology exposure (such as cheap disk versus performance-grade), redundancy (do you have any?), and the proverbial crystal ball (did you predict the future properly?). All of this is topped off by the fact that when you buy hardware, you're already purchasing older technology. We call this a dead-money expense.

TCO Vault #2: Software licensing

Most of us are keenly aware that software licensing is expensive. So, there are a variety of expenses that need to be considered in this vault. Of course, there is the original cost of acquiring the license, but it doesn't end there. It's the cost of patching, fixing, upgrading, and maintaining the licensing that makes the real difference. (And I'm not even talking about software support yet -- that will come in another vault).

size organizations. However, it should always be considered. Just a few servers running 24 hours a day over one month can add up to a couple hundred dollars when you factor in network switches, UPS, etc. Also, remember that cooling and HVAC, on average, account for up to 50 percent of the power costs in data centers. Like many organizations, you probably don't have gas-powered generators. However, I'll bet your cloud provider does. Nobody thinks about these until there is a massive power outage. What value this brings by having added protection and how you choose to account for this in your analysis will have an impact, so look at these items carefully.

TCO Vault #4: Hardware maintenance and software assurance

This vault is simple. Add up your maintenance and software assurance contracts to arrive at your cost. On average, it is minimally 15 to 20 percent of the original cost of the equipment or software licensing annually. As the hardware and software ages, the cost for these services increase.

Cloud solutions bundle support on their services all while protecting you from obsolete technology.

Just the simple, tedious task of managing license keys is a time (and money) drain on the IT resources of many organizations. But what about hypervisor licensing; application virtualization technologies such as Citrix, XenApp, or Microsoft RDS; IDS agents; SAN or NAS licensing; server licenses; and many, many more? This is where things really add up. Take a deep look, but more important, be honest about what you pay for and factor it into your equation.

TCO Vault #3: Power and environmental

This area is often overlooked by small- or mid-

Why is this so important? Well, what happened the last time you called for technical support because your virtual machine host went down? You were probably asked if you had a support contract – at 2 a.m. in the morning. If you didn't, you experienced extended downtime or an astronomically high bill from the professional services company you needed to call. Cloud solutions bundle support on their services all while protecting you from obsolete technology. From a TCO perspective, it's important to calculate what support you pay for now, and what you will save by changing your buying model.

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TCO Vault #5:

Support (personnel) and training

Many think that if they go to the cloud, they won't need on-staff IT support. If you are approaching TCO this way, think again. Part of the cloud's greatest impact is enabling valued IT resources to get out of doing tedious and useless tasks that drain their time, such as cleansing a desktop that has been infected with a virus or spending hours trying to figure out why the green light on the server started blinking red.

The cloud provides a way for centralizing support, or mitigating some aspects of it entirely, because it outsources the basic infrastructure, and lets your organization focus on applications, mobility, web strategy, or whatever it is you'd like to focus on.

You will also avoid additional headcount in the cloud, because the cloud lets you make better use of what you already have. Because budgets and headcounts usually hold companies back, calculate the cost to do EXACTLY the same thing on site. You might not choose to do them in the end, but it's the only way to get a fair comparison. Approach this vault by saying to yourself "if I tried to do this exactly the same on-site, what would it cost me? And if I did, who would I need to hire or train to actually pull it off?"

TCO Vault #6:

Disaster recovery and Continuity

You can't effectively calculate your TCO without having a disaster plan in place. Ask yourself: Do you have a plan in place? How does that plan ensure you will meet your recovery objectives? Do you have a second site or colocation space? Do you tape backups with an off-site courier? Does your IT staff test the plan? If so, how long does it take them?

When you calculate your costs for maintaining the continuity of your business you need to factor in every redundant piece of equipment, the costs of licensing each, extra bandwidth, data center space, your testing procedures, and how all of these compare to cloud-sourcing some or all of it.

When you are done with that calculation, factor in your pick-up for providing faster and better services that have redundancy built in. If you are down for 10 minutes instead of four hours 3 times per year, what did you save? Put that into your TCO.

TCO Vault #7:

The intangibles

This vault includes the things that many people dismiss as a cost that is just too hard to quantify. Well, my recommendation is to do it anyway. Start by determining:

- Cost per employee per hour of downtime.
- Whether or not you are in a power-challenged area, and if so, what it means to you financially if you can mitigate this risk entirely.
- How much a lost transaction or sales order costs your firm on average.
- What your risks are for being out of compliance to regulatory standards.
- Whether you are concerned about technology lock-in, or if you have guessed wrong on a technology purchase in the past that now sits useless in your closet.

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Determining the above will require you to look to your continuity plan. If you have one, then your company has consciously said, "We have risk if we fall outside of a certain period, and it costs us MONEY." Now, does the cloud help in any of these areas? If it does, then that needs a line item on your TCO.

For more information or a free TCO evaluation with an Evolve IP expert, please email tco@evolveip.net.