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BUILD VS. BUY:
Calculate the TCO of BDR

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When selecting backup and disaster recovery (BDR) technology, IT service providers must choose between a variety of integrated solutions from BDR vendors or to build their own. As with everything in IT, there are pros and cons to each approach.

Obviously, you start with the technology itself—does it deliver the performance, capacity and functionality you need? Then, you move on to cost calculations. However, it can be difficult to compare the total cost of ownership (TCO) between integrated solutions from vendors, let alone a DIY solution—it's an apples to oranges comparison.

In this ebook, you'll learn pros and cons of vendor solutions vs. build it yourself, how to weigh upfront and ongoing costs for either, and additional factors to consider, so you can make an informed decision on what's right for your needs. We've also provided a free checklist that can help with your calculations.

START WITH UP-FRONT COSTS

When deciding which approach is right for you, it is important to think big picture. The raw cost of hardware is often the main number IT providers look at—but it actually represents a relatively small percentage of the total cost.

Hardware costs vary based on capacity and performance. If you are taking the DIY approach, you can use commodity x86 servers. Many like the DIY approach because upfront hardware costs are relatively low. BDR vendors on the other hand offer specialized devices with tightly integrated hardware and software that often come at a higher cost. Because of this, you don't need to consider software costs as a separate item. If you are taking the DIY route, you'll need to consider software costs separately from hardware. You'll also need to determine whether the hardware you choose has the capacity and compute resources necessary to deliver efficient performance.

Setup is another important consideration. With a purpose-built BDR, software is optimized by the vendor to work with the device, so setup is generally straightforward. When taking the DIY approach, it's important to understand that you may spend significantly more time setting the system up, testing and tuning it, etc. You need to factor that extra labor cost into the TCO, even if you pass some of it on to your clients. But, if you take the build-it-yourself route, you'll also get flexibility. You can choose whatever

software you prefer, license the specific functionality you need, and switch software providers without needing to purchase new hardware.

Finally, you need to consider cloud setup costs. Some BDR providers factor cloud setup costs into the monthly cost of the service while others charge separate fees. If the BDR vendor you work with does not cover cloud setup costs or if you build your own, you'll need to factor these costs into the TCO.

FACTOR IN OPERATING EXPENSES

Recurring cloud storage and compute costs can be the single largest expense over the lifetime of a BDR implementation—regardless of whether you work with a BDR vendor or build your own. Cost structure can vary significantly, since some cloud providers charge by data volume and others by retention period. Volume will almost invariably grow over time as customers accumulate more data. So, you should include cost increases relative to this growth in your profit calculation.

Ongoing software licensing costs are another important consideration if you build your own BDR solution. Backup software vendors structure their licenses in many different ways. Cost factors can include basic and premium feature sets, installation size (number of servers/CPUs, volume of data, etc.), and platform support (Windows, Linux, VMware, etc). Licenses typically must be renewed annually.

With either approach, you'll have labor costs associated with troubleshooting and other client system management. Customers may face a range of issues with their backup—including system failures, changes in the technology environment (such as the addition of new on-premise and cloud applications), and changes in business requirements (such as new RTOs or compliance mandates). Labor costs associated with outages are also important to consider.

To reduce labor costs associated with troubleshooting it's important consider technical support. When you build your own BDR solution, you'll be dealing with multiple vendors for technical support. When issues arise, this can add a layer of complexity to the situation and lead to finger pointing among the vendors. For this reason, many MSPs prefer to work with a single vendor for BDR needs. In comparison, when you opt to sign on with a

Backup is a great way to generate recurring revenue, since customers need to store data and update their backup-and-recovery capabilities on an ongoing basis.

Backup solutions that deliver the most value over the most time at the least cost will empower you to reap the greatest profits.

BDR vendor, you have a single point of contact for support. Working with a single vendor may lessen potential headaches. However, as you know, not all technical support is created equally. It's important to consider the quality of tech support vendors deliver when evaluating BDR solutions. For example, is support available 24x7 (not all disasters happen during office hours) or are there additional fees applied for tech support help?

ADDITIONAL CONSIDERATIONS

There are many additional factors to consider when calculating the total cost of ownership of a BDR solution. It's relatively easy to put a dollar value on hardware, software and labor costs. However, some "costs" are much harder to estimate, but can have a large impact on the overall value of a solution. For example, if the solution you choose does not deliver the performance your customers need, they will likely become dissatisfied with your service. Below you'll find additional factors to consider and investigate when choosing how you'll provide backup and disaster recovery to clients.

Ease of use is an essential consideration. A BDR system should make it as easy as possible for you to perform a wide variety of actions—from recovering a mistakenly deleted file to rolling an entire database back to its state prior to a file corruption. It also needs to deliver low Recovery Time Objective (RTO) and Recovery Point Objective (RPO), so customers can get back up and running quickly with minimal data loss. Learn how to evaluate RTO and RPO here.

As any IT service professional knows, customers expect backup to just work. When it doesn't, they feel frustrated and even a little ripped off. A trouble-free solution that installs and functions with minimal hassles and disruption is essential for you to provide good customer service and avoid losing clients. Choose reliable technologies that support your efforts and minimize customer churn. When backup "just works," you can focus on growing your business.

When customers have a problem, they expect fast results. So, you need to be confident that the vendors you partner with have a strong service culture and a proven willingness to work directly with your customer when required, so that issues are promptly and fully resolved. As noted above, technical support quality is a critical factor to consider.

Ongoing backup services require ongoing administration, such as billing and reporting. These tasks may have a significant cumulative impact on profitability as your backup business scales.

Finally, the BDR approach you take needs to be scalable. While backup and recoverability needs inevitably grow over time, customers are not always fully accepting of proportional cost increases. In fact, once their costs grow more than a certain percentage, they will be highly motivated to shop for a better deal. To keep them from doing this, it is imperative to allow them to grow their BDR footprint substantially without excessively increasing their costs. It's also essential to consider the number of devices each member of your staff can manage. Obviously, solutions that are easy to manage reduce labor costs and allow your team to be more productive.

Make sure and ask lots of questions and hold potential vendors accountable when discussing solutions. Also, speaking with other MSPs can be very helpful to get real-world feedback about ease of use, support and reliability.

CONCLUSION

There are many things to consider when evaluating a backup and disaster recovery offering, and there's no one-size-fits all approach—your specific skills and business needs should dictate your decision.

Start by identifying technologies that will perform the specific tasks that you need to deliver backup and disaster recovery services. Then look at initial investment and ongoing costs associated with the technologies. Next, look at labor costs associated with managing the BDR solution.

At that point, it's likely that you will have narrowed the field considerably—eliminating options that do not offer the functionality you require or are out of your budget. It's difficult to place dollar amounts on the items in the "value assessment" section of our checklist below. However, gathering that information can help you decide between the remaining contenders.

Be sure to ask lots of questions and hold potential vendors' feet to coals to be certain you fully understand the products you are evaluating. Finally, speaking with other MSPs who have used the solutions is the best way to get real-world feedback about ease of use, support and reliability.

When customers have an outage, every second counts. So the speed with which your solution gets their business back online is critical.

TCO CHECKLIST

As noted above, to accurately calculate the TCO of a BDR solution, you need to look beyond the initial price tag and consider the following:

- **Cost:** How expensive is it to deploy and operate the solution, initially and over time?

- **Value:** What does the solution offer (unique functionality, reliability, support etc.) that makes it valuable to you and your clients?

Even if you don't have exact numbers for all of the calculations below, this checklist can help you estimate the TCO of BDR offerings, whether you plan to partner with a vendor or build your own.

UPFRONT COSTS

Hardware. When comparing BDR vendors consider the functionality of each vendor's offering (because the software is part of the package) as well as capacity and price.

Cost calculation: What is the cost of hardware: $ (_____)

Software. If you are building your own BDR, what is the initial cost to purchase software? To ensure accuracy of your comparison, be sure to compare the specific functionality of the software you choose—not all backup software is created equally.

Cost calculation: What is the initial cost of BDR software?
($0 if software is integrated with hardware) $ (_____)

Implementation. Labor costs associated with BDR setup—initial installation and configuration of hardware, testing, re-tuning, integrating solution components from multiple vendors (if you build your own), etc.

Cost calculation: What is the labor cost for BDR setup (time x hourly rate)? $ (_____)

The fastest possible recovery typically requires an on-premise device that catches the latest snapshot of data and server images.

Cloud/off-site account activation. Initial charges you incur to create backup destination for your customer's data and/or server images. Some, but not all, cloud providers have fees associated with activation.

Cost calculation: What upfront charges do I incur when I set up cloud/offsite storage? $ (_____)

Upfront costs subtotal $ (_____)

ONGOING COSTS

Software licensing: Beyond the initial cost for software, you'll also have to pay to license the software, typically annually. However, software vendors often structure their pricing differently, so be sure to make apples to apples comparisons, as much as possible.

Cost calculation: What is the annual cost for software licensing? $ (_____)

Cloud/off-site storage. This can be the single largest expense over the lifetime of a backup implementation. Cost structure can vary significantly, since some vendors charge by data volume and others by retention period.

Cost calculation: What is the monthly cost to store a customer's data and server images off-site? $ (_____)

Solution monitoring. The labor cost to be certain that backups are in fact viable for recovery. This means ensuring recoverability of data, server images, and applications within target RPOs and RTOs.

Cost calculation: What does it cost to make sure systems are "go?" (time x hourly rate) $ (_____)

While customers' backup needs inevitably grow over time, they are not always fully accepting of proportional cost increases.

Troubleshooting, change management, and other support.
Customers may face a range of issues with their backup—including system failures, technology changes, etc.

Cost calculation: How much will it cost me to perform common technical support tasks? (time x hourly rate) $ (_____)

Administration. Ongoing BDR services require ongoing administration, such as billing and reporting.

Cost calculation: What does it cost to perform routine administrative tasks associated with my managed services? (time x hourly rate) $ (_____)

Integrated support for on-premise and multi-cloud/SaaS applications. Any additional costs to support a customer with combination of on-premise applications and hosted/SaaS systems running in one or more clouds.

Cost calculation: How much more does it cost to protect customers who use applications running on-premise and on one or more clouds? $ (_____)

Ongoing costs subtotal $ (_____)

Total costs

$ (_____)

VALUE ASSESSMENT

Ease of use: A BDR solution should make backup and recovery tasks as easy as possible—from recovering a specific file that a user mistakenly deleted to rolling an entire database back to its state prior to a corruption.
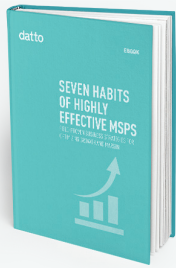
Value assessment: *Is the solution easy to use?*

Reliability. A trouble-free solution that installs and functions with minimal hassles and disruption is therefore an essential antidote to customer churn.

Value assessment: *Can I count on the BDR solution being reliable and trouble-free?*

Responsive, expert service. It is important that the BDR vendor (or vendors) you work with offers 24x7x365 support, expert service and the willingness to work with you and your customers to resolve problems.

Value assessment: *Does the vendor offer adequate technical support?*

Low RTO/RPO. The speed at which your solution gets a client's business back online is critical (RTO or recovery time objective). As businesses do more and move faster, they log more data transactions every minute. So, the ability to avoid or at least minimize data loss is essential (RPO or recovery point objective. Customers don't just need raw data. They need properly configured servers running the business applications. A system that maintains up-to-date, ready-to-run virtual server images has become table stakes for delivering DRaaS.

Value assessment:

- *How quickly does my BDR solution get my customers up and running again following minor (file recovery) and major (cloud failover) events?*

- *How frequently do backups occur and how much data may be lost in the span of time between backups.*

- *Does the BDR enable "instant recovery" of applications?*

Continuous, automated validation. Backups are of no value if they cannot be immediately restored with full application-level integrity. Look for automated testing and validation features when choosing a BDR solution.

Value assessment: *Does the system offer automated validation or other functionality designed to streamline testing?*

Other value-added features. A BDR solution can add further value to the customers—for example, by providing an easy way to fulfill e-discovery requirements or regulatory data retention reporting mandates.

Value assessment: *Is the system useful for anything besides backup and DR?*