Balancing **BUDGETS** and **PROTECTION**

Backup as a service can be a cost-effective part of your company's budget

Determining budgetary priorities is a balancing act. Often, business executives keep a tight rein on budgets, sometimes making the IT department's priority of protecting data difficult. However, if business-critical data is lost and a company folds, keeping the lights on or employee benefits coming won't really matter.

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To illustrate, let's use healthcare and an IT expenditure as an example. Recently, I received my company's health insurance renewal. My broker came back with several options and indicated that our firm would not be grandfathered, nor would we be able to keep our plan. We were, however, provided Affordable Care Act compliant offerings that would provide significantly less coverage and carry a premium increase of 35 to 65 percent. Healthcare costs can be a huge chunk of an organization's budget, and they're growing.

On the IT side, a CIO told me that when he approached his CFO for a $12,000 annual budget approval for a backup as a service (BaaS) solution, the CFO was hesitant to spend the money.

To put the expenditure in perspective, the CIO mentioned the firm's annual $1 million out-of-pocket healthcare costs for 200 employees versus $12,000 annually for BaaS. He further explained that while he understood the $1 million was to protect valuable firm assets—their employees—what if their business-critical data

was lost? The CFO understood and approved the expenditure. The reality is that his annual healthcare cost may rise to $1.3 or $1.6 million, but the BaaS cost is fixed at $12,000 annually.

Before you think BaaS is a luxury and perhaps an unnecessary one at that, consider nationwide studies have indicated that firms have a 1 to 2 percent chance annually of experiencing a complete disaster, but upwards of a 70 percent chance annually of experiencing data loss. In my opinion, only two kinds of

companies exist—companies that have lost data and companies that will lose data. Losing data has significant consequences for your business and your clients—not just from a financial perspective in lost time and recovery costs, but also damaged reputation and the long-term consequences of permanent loss of critical data.

Five Key Questions

Determining the best solution, implementation and testing can be daunting. Your solution is only as good as the weakest link. The best approach to backup and disaster recovery (DR) is simple and can be defined by deciding on recovery time objective (RTO) and recovery point objective (RPO).

Consider these five key questions when assessing backup and DR solutions:

1. Which data, applications and servers will, if lost, impact your business functions and in what time frame?
2. What are the technologies hosting this information today and in the foreseeable future (hardware, virtual machines, operating systems, databases, heterogeneous platforms)?
3. In the event of a loss, how quickly do you need to get the data back and systems up and running?
4. Which personnel would be involved in the recovery process, including client and/or patient notification?
5. Where would your recovery happen should you lose access to critical servers or your complete site?

Best Approaches

If your required RTO is less than one hour, high availability (HA) is your best option. But take note that HA provides replication—not

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archival. More than 90 percent of firms that run HA still utilize tape as their primary source of archival backup. Many firms also compliment HA with BaaS for archival. Generally BaaS provides customized backups for days, weeks, months and years. The more popular solutions may only utilize 24 GB on a vault while tape would utilize 2.4 TB. Compression, deduplication, bit-block processing and encryption are essential.

If your RTO is 12, 24 or 36 hours and your RPO is "last backup," which is generally the night before, you may consider the increasingly popular BaaS coupled with remote hardware recovery. In most cases, BaaS and BaaS with remote hardware DR run one-third to one-half the cost of traditional HA.

Depending on the amount of data to protect—and the number of servers, databases and locations—BaaS deliverable options can range from a true service offering with a fixed monthly

How to Get Funding

As an IT professional, you may wish to consider the following to increase your chances of expenditure approval:

- Define current business issues and pains regarding backup and disaster recovery.
- Complete a cost analysis for your existing backup procedures.
- Raise internal awareness of what losing data can truly cost the company.
- Take your case to senior management and C-level executives.
- Determine if the vendor you're considering has an experienced and verifiable track record.
- Complete nondisclosure agreements with vendors who have access to your sensitive data.
- Promote best practices.
- Define any applicable compliance requirements.

cost to single or dual appliances (local and remote) or software licensing.

Benefits of BaaS

A BaaS solution should provide you with several benefits. Look for the following to be part of the solution you choose:

- Support for hot and cold backups, including "save while active," ensuring critical data can be protected without taking systems offline
- Protection for system data, native DB2* databases, IFS files, folders, logical and save files to provide a complete DR of IBM i and Intel* servers
- Encryption of data while in transit and in storage with Advanced Encryption Standard encryption to ensure security of sensitive data
- Efficient algorithms to significantly compress the data, allowing faster backups and restores as well as a reduction in storage needs
- Concurrent and parallel backups/restores of LPARs to reduce the management and cost of the backup solution while improving performance
- An intuitive console to easily manage backup and recovery tasks locally or via remote access

Solving Business Issues

At the end of the day, solving problems and spending your organization's budget dollars wisely are what it's all about. Many IBM Power Systems* IT managers and CIOs have discovered better and more cost-effective solutions by evaluating options in the marketplace and conducting due diligence. Take the time to discover what's best for your organization. **P**