



Jeff Kaplan

The Rapid Evolution of Storage-as-a-Service

Organizations Get Comfortable with Third-Party Handling of Today's Storage Demands

Iron Mountain recently sat down with Jeff Kaplan, managing director of THINKstrategies, for an in-depth look at the evolution of Storage-as-a-Service.

Q.: What business factors are driving the momentum behind Storage-as-a-Service?

A.: There are several. First and foremost, the volume of electronic information is exploding, in the form of email and voicemail messages, documents, online presentations, images and video. In most businesses, these files are generated by and distributed among an increasingly dispersed workforce, as well as to and from external customers and partners. In many cases, this means that these files are being reproduced and redistributed in a way that compounds the fundamental storage challenge. As a result, an increasing proportion of corporate data is unstructured and difficult to manage. While few small and midsize businesses have the in-house staff and skills to handle these challenges, just as critical is that many larger enterprises would attain lower TCO and higher protection of data by offloading this responsibility.

Second, in an increasingly competitive market, businesses need to better organize and utilize corporate data to more effectively respond to customer needs and enhance employee productivity. However, many companies can't afford to buy the storage systems and hire the staff to address these requirements.

Third, escalating government regulations and industry standards require more stringent "passive" data management and archiving

for compliance purposes. Publicly traded corporations, along with companies that do business with these corporations and government agencies, and organizations operating internationally, must adhere to stiffer rules regarding data archive, retrieval and discovery. Complying with these regulations demands significant investments in sophisticated storage systems and trained staff, as well as ongoing operating expenses.

Rather than make significant capital investments in storage systems and software and hire additional staff to manage these facilities, many businesses are recognizing the value of Storage-as-a-Service alternatives, which “out-task” this burden to a specialized service provider and leverage the provider’s expertise, experience and best practices.

Q.: How has Storage-as-a-Service evolved?

A.: The Storage-as-a-Service concept for electronic records and information has been evolving over the past three to five years. Although the concept originated in the dot-com era, it began to gain market acceptance among consumers two or three years ago, as they sought convenient storage solutions for their digital photos and other personal files. These services have made people aware of the value of their files, how vulnerable they are to being lost and the amount of storage space needed to safeguard them. A number of storage services emerged to target the small office/home office (SOHO) market. These quickly became popular with corporate employees working from home or on the road who wanted to protect their documents and other files.

Today, enterprises are recognizing the need for a companywide storage program and a central-

ized storage facility to handle their employees’ needs anywhere, anytime. IT managers, corporate executives and business decision makers are all becoming more comfortable with the idea of using a third-party service to satisfy this requirement. They have also recognized the functional and financial benefits of these services.

Most important, Storage-as-a-Service is shifting from the simple capture and warehousing of infor-

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mation to providing value-added services that enable customers to better utilize their corporate data. One of the most valuable of these services is eDiscovery and recovery for litigation and compliance purposes.

Q.: What are the differences between Storage-as-a-Service and Software-as-a-Service?

A.: Storage-as-a-Service and Software-as-a-Service are based on the same principles. First, both leverage a single service-delivery infrastructure to satisfy the needs of many users. This multi-tenant architecture makes it easier for the service provider to deliver secure, scalable and reliable services, and creates economies of scale that permit the service provider to offer its solutions at an attractive price. Second, both include options that allow customers to choose the service level—and ideally the additional services—that best meets their business requirements and budget. Third, both can be continuously enhanced based on customer feedback without disrupting service

availability or forcing customers to have to change their operations. Finally, both services give customers more predictable costs.

Q.: How does today’s typical storage environment differ from a Storage-as-a-Service arrangement?

A.: Today’s typical storage environment is becoming increasingly complex and costly. Businesses are generating new digital information or data at a dramatic rate, often

growing as much as 60 percent per year. Regulatory and industry standards require that companies archive more and more of this data. As a result, the demand for digital storage and its associated management is accelerating. Backup windows are getting longer and data recovery is becoming less practical. This creates a dissonance between recovery point objective (RPO) and recovery time objective (RTO) and reality.

There is also a proliferation of new and sophisticated storage systems and software, which require specialized skills and experience to select, deploy and administer. Few companies can afford the luxury of hiring the staff, making the capital investment and allocating the operating expense to building and maintaining their own storage systems. And among those companies that do manage their own storage systems, many admit they are not optimizing these operations. There’s also increasing awareness of the ecological impact of running their own storage systems—the carbon footprint of these systems is a concern, along with escalating

[Q&A]

fuel and electrical costs to power and cool them.

Storage-as-a-Service enables companies to leverage the skills and resources of a storage and/or services specialist. With its pay-as-you-grow subscription pricing model, leading Storage-as-a-Service providers are compelled to use the best technology and best practices to deliver quality services that can give them a competitive edge.

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Q.: What types of companies would benefit most from Storage-as-a-Service?

A.: Companies of all sizes can benefit from Storage-as-a-Service. Large and medium-size enterprises, SMBs and SOHOs are all struggling to organize, protect and manage the proliferation of data, and cannot afford to dedicate the money or staff to handle this challenge on a daily basis. SOHOs and SMBs may rely on Storage-as-a-Service to satisfy their data management needs. Large enterprises may leverage these solutions to augment their in-house capabilities. However, companies in highly regulated and litigated industries, public companies that need to comply with internal and external compliance requirements, and companies that need to protect, store and archive large amounts of data can particularly benefit from Storage-as-a-Service.

Q.: What are the most important factors a company should consider when looking for a Storage-as-a-Service provider?

A.: First, the quality and reliability of

the service itself: How is the service architected, and what has been its track record for availability, throughput and performance? Second, ask what features are in place to allow you to easily manage and access your data: How quickly can data be restored and recovered? Third, what security measures are in place to safeguard and protect valuable data? Are the service provider’s security measures certified with a SysTrust or other relevant certification?

You should also ask how easy the service is to use and how flexible the service options are. Does the vendor adhere to industry best practices and have a track record of success delivering reliable and cost-effective services? Ask for references and investigate how well the vendor serves companies in your industry or of your size and complexity.

Finally, evaluate the provider’s longevity and financial viability. The Storage-as-a-Service market is becoming increasingly competitive on price and will inevitably experience a shakeout. Be sure the vendor is strong enough to withstand these competitive challenges.

Q.: Making data “actionable” and useful is a cornerstone of the Storage-as-a-Service model. What does that really mean?

A.: Making data actionable means leveraging the service to better manage, protect and store valuable files and records so they can be more easily retrieved for not only routine, day-to-day purposes but also discovery and corporate

governance requirements. It also means making sure the data is recoverable, and ensures customers can access their data in the storage archive so they can find relevant documents and critical information to meet litigation and compliance demands.

Q.: Do recent acquisitions and announcements of new service offerings signal that Storage-as-a-Service is moving into the mainstream?

A.: Yes. These moves are in response to growing customer demand for these services to address the overwhelming challenges associated with storage management. The broad-based acceptance of consumer-oriented storage services has helped to fuel the emergence of comparable solutions aimed at meeting the needs of businesses of all sizes. With no end in the explosive growth of data in sight, the need for cost-effective and reliable storage and protection services is only going to escalate.

We are currently in the “gold rush” stage of the market, which is attracting a proliferation of players seeking to capitalize on this opportunity. This proliferation will inevitably be followed by a shakeout as customers select those providers that can offer the strongest set of storage and related value-added services and have the greatest financial viability. ▲

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