



ESG BRIEF

Data Protection Predictions for 2021

Date: December 2020 **Author:** Christophe Bertrand, Senior Analyst

ABSTRACT: This brief looks at some of the key trends and events that will shape data protection with regards to backup/recovery, compliance, and intelligent data management in 2021.

Overview

No one could have predicted the COVID-19 pandemic and the profound impact it has had on our lives, our society, the way we now work, how we market our products, and the ripple effects on IT infrastructure and data in general. This (I hope) once-in-a-lifetime event is placing data protection at the top of many lists, something that our research highlighted in 2020 and, looking ahead to 2021, will directly affect IT strategies against a backdrop of accelerated digital transformation/optimization. Our recent research shows that 50% of organizations will increase their data protection spending in 2021, and improving backup and recovery is the area of data center modernization in which the largest percentage of respondents expected to make significant investments over the next 12-18 months. As organizations prepare their “return to work,” updating business continuity/disaster recovery (BC/DR) plans is a top priority.¹

These are my top five predictions for 2021 for the spaces of back up/recovery, compliance and intelligent data management.

Container Data Protection

As many new applications are becoming containerized and/or deployed in the cloud, data assets must also be protected in a way that meets traditional data protection KPI, such as RPO and RTO. These are only becoming more stringent, based on our 2020 research on the topic.²

The battle for data protection of container environments heated up significantly last year across vendors in the backup/recovery and storage spaces. As a growing number of organizations re-platform, “hybridize” and “cloudify” their applications, leveraging containers and associated management frameworks and tools is happening at high speed. Expect to hear a lot about “container sprawl” in 2021.

Our research shows that many organizations do not really understand how to protect these environments and are falling behind...they are in catch up mode. Very much like what we saw in the SaaS space, there are some disconnects with regards to data protection SLAs. It is also a great education opportunity.

In the last couple of years, we’ve seen several partnerships and acquisitions, signaling that many vendors want to capitalize on this wave (for example, the acquisition of Hedvig by Commvault in 2019 and the acquisitions of Kasten and Portworx in

¹ Source: ESG Master Survey Results, [2021 Technology Spending Intentions Survey](#), December 2020.

² Source: ESG Master Survey Results, [Data Protection Considerations for Containers](#), December 2020.

2020). It took years for virtualization to become mainstream and to be fully integrated with backup and recovery tools. For containers, it's happening with a finger stuck on the fast forward button.

In 2021 we are going to see the battle lines and the competitive positions harden as camps emerge on the best way to protect container environments and their associated data sets in a way that is consistent with mission-critical data protection KPIs: applications versus storage versus a mix of both. It will be a year of intense marketing and market education to help end-users understand how to adjust their strategies. Or will it confuse them further...?

Intelligent Data Management...or Intelligent Data Lakes?

Data is the fuel of digital transformation, but it's hard to truly manage. Intelligent data management is about reusing data and considering it an asset that should provide an ROI. To truly leverage data, it must be classified and "sanitized" to be reusable in a compliant fashion. Indexing and classifying is also critical to cybersecurity. I believe this is the future of backup and recovery—its transformation into intelligent data management. For more on the topic, see my blog and video, [From Backup to Intelligent Data – Introducing a New Maturity Model](#). In 2020, we have seen some vendors introduce more capabilities, giving end-users the ability to search or flag sensitive data. It's a start!

Our research shows that classifying all data (on-premises and in the cloud) leads to more effective business decisions and higher confidence levels and satisfies security and compliance requirements.³ The data also need to be "sanitized," if only for compliance and security reasons. I call this "data hygiene." Yes, clean data is good data. Clean data that is highly secure and easily reusable is the objective. It's hard to do with the many data silos that exist in the enterprise. In parallel, many organizations have built data lakes but are struggling to fully leverage them—how many articles have we read about dark or dormant data?

The last thing backup vendors should want is to be just another source of data in the future. To avoid this predicament, it's time to invest in intelligent data management capabilities.

In 2021 I see the emergence of eco-system solutions that deliver "intelligent data lakes." To get there, traditional backup and recovery solutions must keep adding features, partnerships, or acquired technology in the spaces of data indexing and classification for ALL the available data sources, including SaaS applications, as they partner with infrastructure and cloud providers who supply the data lakes.

Tape

As I mentioned last year, tape is not dead and is far from disappearing anytime soon. As a matter of fact, tape is very likely to become even more popular because of its cost profile as a medium and its seemingly unlimited ability to store exponentially growing amounts of data.

The technology has significantly evolved in the past few years. It is now easier to use, easier to integrate, and it "plays nice" with other storage devices in integrated solutions, such as active archives. There are many use cases that only a few years ago would not have seemed very natural. The ability to handle and store an immense amount of data at the right operational cost at scale meant that the only option available had to be tape. Just ask hyperscalers!

In 2021, there are many use cases for which tape will keep being a great complementary solution to frontend memory or disk systems. Many of them are vertical in nature and often associated with HPC-type of workflows. One (unfortunately) horizontal use case is very salient today and likely will only grow in popularity: cyber-resilience and isolated recovery (see

³ Source: ESG Research Report, [The Evolution from Data Backup to Data Intelligence](#), February 2020.

prediction on this topic). Tape essentially provides air gapping at scale at a great price point. Our research confirms that this is what end-users think too.

In 2021, analytics use cases are also going to drive the adoption of intelligent/active archives with tape. Our research shows that end-users are seeking solutions to improve data analytics for real-time business intelligence and customer insight. Some of the expected analytics use cases include data quality validation, data cleansing, data sampling, and data reduction.

Cybersecurity/Cyber-resilience

This one is short and bitter. Cyber-crime is the gift that keeps on...taking. It's not going away and will only intensify. Our research shows that strengthening cybersecurity is the top business initiative driving IT spending in 2021.⁴

Integrating cyber protection and remediation mechanisms as part of BC/DR strategies is essential. In 2021, I expect to see an intensification of partnerships and cyber-resilience type ecosystem protection solutions. This also includes on-premises and hybrid isolated recovery solutions (maybe with tape!) or air-gapped type topologies.

I expect that we are going to hear a lot more about [Sheltered Harbor](#)-like standards across industries. Backup vendors have a key role to play in delivering data vault solutions (offline, untouchable backups).

Cloud Data Protection

There are two topics to unpack here. One is using the cloud to protect your data (wherever it lives); the other is the maturity of data protection of data that is in the cloud. This last topic is intertwined with containers' data protection to an extent.

Data protection as a service has become very popular in its various forms. I expect that our research will show further adoption of "as a service" solutions focused on data protection and data management. We're just kicking off research on the topic and you will hear more about it in 2021. Stay tuned!

The protection of cloud data is getting better, but there still many gaps that exist. What is cloud data anyway? It can be many things...the key is the degree of control one has over it and the technical capabilities of the cloud provider to interoperate with the backup and recovery solution. Understanding the level of control one has and the need for coherence of RPO and RTOs across all your data is where the challenge lies.

For example, SaaS data must be "extracted" from the provider and not every SaaS application has designed the most efficient type of mechanisms that allow third-party solutions to call on their service for backups. With many end-users working remotely and leveraging many different SaaS applications in the COVID era, it's become pretty apparent that there are many gaps. In 2021, I expect that the SaaS data protection disconnect will become more apparent as organizations experience data loss and unavailability events.

Hyperscalers are adding capabilities with in-cloud snapshot, which can be leveraged by backup solutions. However, having a solution that is native to the hyperscaler's platform is becoming very relevant for cost, performance, and scale issues. In 2021, the cost pressures of cloud-based and/or to-the-cloud data protection will become increasingly acute and visible.

The Bigger Truth: The Digitally Transformed Sales and Marketing Process

Many marketing teams in the data protection space had to literally re-invent themselves and their marketing mix in 2020 with major (lead-generating) events going away overnight. It is with great respect that I have been watching many teams

⁴ Source: ESG Master Survey Results, [2021 Technology Spending Intentions Survey](#), December 2020.

turn their ships around and go full-digital. For some, it was already in their DNA. For others, it challenged them at their core, throwing their awareness and demand-generation efforts into full rethink mode.

Here's what I'd like to say to these teams: I know how hard and difficult it has been, and while execution may not have always been perfect on some digital events, it's important to recognize the great work and effort that you have delivered. It's also unlocked many new ways to deliver content, educate the market, and take your message out.

My prediction for 2021 is that we are going to see more digital events (shocker!) and great content from "snackable" short pieces to full in-depth sessions, depending on what end-users need to "consume." If it sounds like a supermarket for product and technical information, don't be surprised. That's exactly where we're headed digitally. All the things you could do as an end-user when going to a big event (in Vegas, for example. Remember those?) you can now do online—more or less—as a virtual booth and session browser, choosing to engage when you want and how you want.

Physical events will come back locally or regionally—my bet is in the second half of 2021 when it's safer and more manageable. Travel restrictions will be in the way across states or internationally for a while. This will be a great opportunity for vendors to actively engage with their channel partners and local end-users to reconnect in person.

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