



## Buyer Case Study

# Large Italian Bank Consolidates Secondary Storage into Cohesity DataPlatform for Backup Efficiency, Analytics, and Simplified Infrastructure

Silvia Cosso

Archana Venkatraman

## IDC OPINION

---

Unprecedented growth in data, heterogeneous and complex datacenter infrastructure, multicloud strategy, fragmented backup silos, sprawling application assets, and the growing need for analytics and information compliance continue to pressure companies. Many organizations find that multiple point-based data management tools are adding to complexities affecting storage performance, efficiency, and costs.

IDC's 2016 datacenter end-user survey of more than 640 datacenter managers revealed that ensuring a restoration of critical workloads in minutes rather than hours is the number 1 challenge (41%), followed by improving backup performance to shorten the backup window (37%). Meanwhile, 20% of them said that they have too many copies of their data, while 30% lamented that their storage infrastructure is too complex to manage.

As a consequence of a siloed, too complex backup environment, the majority (33%) of companies said that backup, archiving, and disaster recovery (DR) workloads will drive the majority of their IT infrastructure investment in the next 12 months.

In a crowded data management marketplace with multiple vendor solutions, however, organizations need to evaluate solutions with due diligence and opt for technologies that can help them overcome their main data protection-related challenges but at the same time enable them to execute on their broader infrastructure strategies: automation, analytics, multicloud adoption, and storage consolidation.

## IN THIS BUYER CASE STUDY

---

This IDC Buyer Case Study discusses the backup challenges that a large European financial institution was facing and how it overcame them with Cohesity's DataPlatform solution. It also assesses the indirect benefits the bank achieved such as eliminating storage architectural complexities and improving performance and efficiency of its storage infrastructure.

## SITUATION OVERVIEW

---

To better assess the advantages that can be achieved in deploying Cohesity's hyperconverged platform to tackle secondary storage challenges, IDC asked a large Italian financial institution to share its experience.

### Organization Overview

The company is one of the largest financial institutions in North Italy and has a track record of being at the forefront of IT innovation. It was one of the first banks in Europe to deploy Pure Storage's all-flash array (AFA) systems in its primary storage environment. The IT team has embarked on a three-year

project to have a software-defined datacenter (SDDC) and is currently testing the environment for storage, server, and networking infrastructure.

The bank's IT infrastructure is a mixed environment comprising virtualization, physical storage area network (SAN), business-critical applications, and Unix enterprise operating system and mainframe.

It includes 16,000 physical servers and around 12,000 virtualized ones, with a mix of VMware vSphere (about 60%) and Microsoft Hyper-V environment (40%).

In total, virtual machines account for 3PB (petabytes) of the bank's entire storage capacity, while non-virtualized ones account for less than 1PB.

The bank's workload structure is primarily made up of structured data, with unstructured data just accounting for less than 10% but growing steadily.

As part of the bank's datacenter modernization and refresh plan, it aims to increase the Hyper-V footprint and shrink the VMware footprint and invert the 40:60 ratio.

## Challenges and Solution

Until a year ago, the bank was facing a fairly complex backup, disaster recovery, and archiving environment, based on two separate systems (Dell EMC Data Domain and Veritas NetBackup) involving mainframes for long-time retention of critical data.

Because of that, it faced a challenge in backing up a highly mixed physical/virtual environment in a seamless way: the two systems were hard to integrate, and the connectivity between the backup system and the virtual center created bottlenecks.

As the IT team was expanding the Hyper-V footprint, it found that its backup and data protection solution Veritas NetBackup had deeper integration and compatibility with VMware vCenter.

The bank's main issue was the inability to back up all virtual machines in one day. As a result, the IT department had to schedule multiple windows, and the backup was restricted only to one per virtual machine per week, while the minimum requirement was of at least one per day for the whole virtual environment.

Another issue was the legacy, disk-based system featured a low deduplication ratio and poor copy data management capabilities, resulting respectively in a heavier backup workload and proliferation of unnecessary copies.

Moreover, since the bank used backup data to run analytics, the available data was already too cold to provide meaningful results.

These challenges, and the risk involved with infrequent and late backups, persuaded the bank's IT department to follow, for their secondary storage, a similar approach to the one that had already proved successful in its primary storage environment: shifting investments from a complex, siloed legacy environment, toward a next-generation one that allows for higher manageability and automatization.

The bank started exploring product alternatives, with the aim of consolidating its heterogeneous secondary storage environment with one supplier only. It went as far as visiting Silicon Valley to single out a supplier able to bring three key requirements:

- Secondary storage environment simplification
- Daily full backup of the whole virtual environment
- Reduction of datacenter footprint through a better deduplication ratio and elimination of unnecessary copies

After evaluating several companies (including data management start-up Rubrik), the bank's IT department chose Cohesity's DataPlatform.

Cohesity offers a hyperconverged platform that can consolidate all the secondary storage workloads (from backup to test and development) in a scale-out infrastructure, with converged data protection, native cloud integration, built-in analytics platform, and automated DR capabilities.

DataPlatform is a distributed storage system designed to consolidate all secondary storage. It features the benefits of a hyperconverged infrastructure (HCI) that end users expect such as simplicity, speed, and ease of deployment. In IDC's 2016 datacenter end-user survey, nearly 40% of datacenter managers cited ease of deployment as the key benefit of hyperconvergence, followed by scalability (35%) and easier DR and backup features (33%).

The bank's IT team selected Cohesity's solution because of its technological architecture. DataPlatform is based on a distributed file system (similar to Google File System) that makes it more scalable, open, and efficient. This scalability, coupled with DataPlatform's other features such as S3, NFS, and SMB interfaces, meant that the bank's IT team could use it beyond backup to consolidate its secondary storage.

Furthermore, the backup data from the platform could be used for analytics purposes in real time, and the log data could be used for compliance and security purposes.

These three functionalities – scalable and open platform to overcome backup performance challenges, the ability to go beyond backup to secondary storage and analytics – were very important to the bank's IT, making Cohesity's solution a right fit for its needs.

Following these considerations, the bank started a pilot of Cohesity's DataPlatform.

After one year of deployment, it has already migrated most of the backup of its virtual environment (both VMware and Hyper-V) to Cohesity, and it currently backs up 6,000 VMs and plans to add the remaining ones in the near future, displacing its entire legacy backup infrastructure.

Thanks to Cohesity's deployment, the Italian bank achieved the following benefits:

- **Reduction of the backup window.** In detail, the window passed from an entire day to 15 minutes. This allowed the bank to take a snapshot of its whole virtual environment every hour, as opposed to once per week with the old legacy backup systems.
- **Operational simplicity for backup and restore.** The availability of an automated and easy-to-deploy restore system empowers the end users to initiate their own restore of single files whenever required, without the involvement of the IT department, and restricting the operation to single files.
- **Reduction of silos and consolidation of secondary storage environment into a single platform.** Thanks to DataPlatform, the bank achieved better efficiency in two ways: above all, simplifying its backup environment from three platforms to one, getting rid of multiple, hard-to-integrate legacy systems. The bank was also able to transfer other secondary storage applications into the same platform, further reducing its storage footprint. As an example, the bank achieved 20% reduction of capacity in its primary storage platform used for test and development purposes.
- **Compelling data reduction ratio.** Cohesity natively supports global data reduction technology within DataPlatform. The bank more than doubled the data reduction ratio from its older dedupe appliance, making it comparable with the one achieved in its AFA-powered primary storage environment. Cohesity, moreover, eliminated unnecessary copies of data thanks to its copy data management capabilities. In fact, the bank's previous legacy backup system used to produce and retain several copies of data from each single VM, multiplying exponentially the amount of stored data with heavy impact on the bottom line.

- **Ability to use backup data for analytics purposes.** Although the bank has not yet taken advantage of Cohesity's built-in analytics platform, it is now able to carry out its internal analytics on recent backup data, without having to rely on older, cold data as before.
- **Simplified management.** The IT team benefits from simple policy-driven backup features. It orchestrates the policies through an internal orchestrator in the platform, and the rest of the backup is all automated, enabling IT personnel to focus on other strategic priorities.

## Results

With Cohesity, the Italian bank has also been able to:

- **Consolidate.** All its secondary storage environment is now in a single, easy-to-manage platform, including workloads such as data protection, test and development, and analytics.
- **Automate.** The backup is automated and policy-driven with a built-in internal orchestrator, while the bank's legacy systems require a manual setup for each VM.
- **Scale.** Cohesity's systems scale out, allowing to scale on demand and avoid storage overprovisioning.
- **Increase flexibility.** DataPlatform can run on both physical and virtual environments, and covers both file and object. It can also sustain both VMware and Hyper-V, which is critical given the bank's mixed environment.
- **Analyze.** With Cohesity, the bank can use its backup data directly for internal analytics.

In short, the financial institution met all its KPIs: improved efficiency, ability to go beyond backup such as using data for analytics purposes, and eliminating complexity (by adopting a single platform to consolidate all secondary storage).

## ESSENTIAL GUIDANCE

---

### For IT Buyers

- **Re-evaluate new technologies for backup.** HCI adoption has been on the rise for the past two years, and it is also proving mature enough to fully sustain and simplify secondary storage workloads.
- **Assess solutions that go beyond your core need to get more value for money.** The Italian bank's primary focus was to overcome backup and restore challenges. But it selected a solution that helped its other objectives such as analytics, secondary storage consolidation, and implementing a cloud-ready environment. While point solutions offer targeted results, broader solutions can increase the benefits.
- **Look for integration with cloud storage.** As enterprise IT becomes more heterogeneous, hybrid, and multicloud, it is important to assess the on-premise system's integration with the cloud to have an end-to-end data management platform for long-term archiving, retention, and analytics strategies.

### For Cohesity

- **Keep an open mind to expanded workloads.** In the medium term, Cohesity's focus on secondary storage is highly strategic because it shields the increasing competition happening in the HCI environment and grabs end users' attention thanks to secondary storage positioning. However, since this choice is mainly strategy-driven rather than limited by the platform's technical capabilities, the company should consider a road map to integrate both primary and secondary storage into its platform.
- **Play up its leadership team's credentials.** Cohesity founder Mohit Aron is a hyperconvergence veteran (he was also the co-founder of Nutanix). Prior to that, he has been instrumental in the design and development of the Google File System. This track record of innovation and the

ingenuity to introduce HCI to the secondary storage market combined with analytics capabilities gives Cohesity an edge over the competition.

- **Offer proof of concept to fight the "new vendor risk" syndrome.** Giving end users the opportunity to test the system before committing to purchase serves as a reassurance for them and helps open new opportunities.
- **Future-proof in advance to avoid the incumbent vendors' dominance in the market.** IDC expects the HCI segment to follow a similar path to the one that has characterized the all-flash storage segment so far. AFA, similar to HCI, broke into the market thanks to the vision of new start-up players. But after a period of transition and higher popularity, it has ended up becoming the game of the usual, incumbent players, which have the financial strength and distribution powerhouse to purchase the visionary start-ups which initially created it.

IDC also believes that Cohesity will need to start future-proofing its existence through partnerships with incumbent vendors to guarantee its survival. The deal with Pure Storage, in particular, is in the right direction, but to expand Cohesity's reach and allow it to get a critical mass in the market, more partnerships are needed, and reference architectures could be a good way to start.

## LEARN MORE

---

### Related Research

- *IDC Worldwide Quarterly Enterprise Storage Systems Tracker, 4Q2016*
- *Watson Meets Storage: IBM Adds New All-Flash Offerings Architected for Real-Time Analytics and Cognitive Workloads* (IDC #EMEA42442317, April 2017)
- *Veritas Strengthens Position in Multicloud, Hybrid IT World with Cloud Data Management and Protection Strategies* (IDC #EMEA42424017, April 2017)
- *EMEA Software-Defined Storage Controller Software Market Forecast, 2016-2020* (IDC #EMEA42242516, January 2017)

## About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

### IDC U.K.

IDC UK  
5th Floor, Ealing Cross,  
85 Uxbridge Road  
London  
W5 5TH, United Kingdom  
44.208.987.7100  
Twitter: @IDC  
idc-community.com  
www.idc.com

---

#### Copyright Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit [www.idc.com](http://www.idc.com) to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit [www.idc.com/offices](http://www.idc.com/offices). Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or [sales@idc.com](mailto:sales@idc.com) for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or web rights.

Copyright 2017 IDC. Reproduction is forbidden unless authorized. All rights reserved.

