The Business Value of Commvault Cyber-Resilience and Data Security Solutions for the AWS Cloud

Phil Goodwin
Research Vice President, Infrastructure Systems, Platforms and Technologies Group, IDC

Ladislav Kinda
Consultant,
Business Value Strategy Practice, IDC

Table of Contents

CLICK ANY HEADING TO NAVIGATE DIRECTLY TO THAT PAGE.

Executive Summary

IDC spoke with organizations using Commvault cyber-resilience and data security solutions for AWS infrastructure environments (Commvault on AWS) to conduct a study of the combined solution's business value. The research methodology made use of both qualitative and quantitative data, blending these two perspectives to capture an as-close-to-reality-as-possible picture of the effects of Commvault on AWS implementation for organizations.

At the center of the research stood the topics of data resilience and recoverability, data management, staff efficiency, and data management environment stability. IDC determined that Commvault on AWS delivers a high degree of improvements and benefits in all of these areas, resulting in more efficient data management, better data security, improved data performance, and lower infrastructure costs.

Specifically, organizations reported that Commvault on AWS has helped them:

- **Create an efficient data management environment,** where responsible staff can pivot from a short-term problem-solving role to a more long term–oriented strategic approach
- **Significantly shorten backup windows and make backup processes more reliable** as well as improve metrics associated with data and system recovery
- **Improve security robustness** and avoid a majority of previously expended costs related to cybersecurity incidents
- **Realize substantial savings related to storage** and deploy cloud workloads and storage faster

Click highlights for related content in this document.

BUSINESS VALUE HIGHLIGHTS

309%
three-year return on investment

47%
average RTO reduction

24%
average RPO reduction

63%
shorter backup window

75%
faster to investigate and remediate threats

$206,000
average savings on AWS storage and database resources

44%
faster to deploy workload to AWS cloud

Situation Overview

Ever-growing data is simply a fact of life for IT organizations. IDC research shows that the worldwide noncloud, datacenter-installed base will grow from 2.1ZB in 2024 to 3.4ZB in 2027.

During that period, data stored in the cloud will grow from 5.0ZB to 11.7ZB (source: *IDC's Worldwide Global DataSphere,* 2023). A majority of organizations have substantial portions of their data estate spread across both traditional datacenters and the cloud.

At the same time, the ongoing threats to data have never been greater. Ransomware, data exfiltration, sabotage, and other malware — with natural disasters and system failures always being a possibility — make the task of protecting data more complex and challenging year over year. Modern organizations need to equip themselves with tools and strategies that can evolve along with data growth and data threats. These solutions must be capable of protecting the entire data estate, whether on premises, in the cloud, or at the edge.

The bedrock principle for cyber-resilience and data security strategies, regardless of threat, is absolute data survivability. This requires a combination of layered backup, immutable data copies, end-to-end data encryption, air-gapped data copies, and offsite data copies. Most organizations use a combination of on-premises data backup and cloud-based backup and protection.

With such demanding requirements, selecting the correct cyber-recovery and data security solutions can be a daunting task for IT leaders. With every product having strengths and weaknesses and every vendor claiming superiority, taking an objective view to product capabilities helps differentiate solutions. IDC's business value analysis is designed to give such an objective view.

Commvault Data Protection Solution with AWS

Commvault and AWS have collaborated to bring customers joint solutions, whereby Commvault provides cyber-resilience and data security that leverages AWS for secure and scalable cloud data storage and compute resources.

Commvault offers comprehensive cyber-resilience and data security solutions for on-premises and cloud-based workloads. The company utilizes backup to the cloud, either from on premises or within the cloud. The Commvault Cloud platform includes backup and recovery, proactive cyberdefense, forensics, governance, detection, monitoring,and reporting. Commvault also offers a BaaS solution with a data plane that runs on Amazon EC2 and utilizes Amazon S3 and Amazon S3 Glacier as storage targets.

Commvault protects workloads running in AWS, including Amazon EC2, Amazon EKS, Amazon RDS, Amazon Aurora, Amazon FSx, and Amazon Redshift, and leverages storage services such as Amazon S3 and Amazon S3 Glacier as backup targets. Commvault also has ways to optimize customers' cloud costs through deduplication and compression of stored data, elastic resource provisioning, and integration points that accelerate how data is accessed and recovered. The software can also orchestrate and manage AWS-native snapshots and restore directly from them for accelerated recoveries. In addition, Commvault can restore or migrate workloads from on premises or other cloud providers to run on AWS, enhancing customers' agility and ability to recovery from cyberattacks or disaster incidents.

AWS is a major cloud provider, offering a wide range of services. With datacenters around the world, AWS can offer services and tools for application failover and data replication to numerous geographical locations to optimize protection, performance, and uptime.

Storage services offered by AWS include:

- **Amazon S3**
  Secure, durable, and scalable object storage
- **Amazon EFS**
  Shared storage for file services
- **Amazon S3 Glacier**
  Low-cost, secure, and durable storage for archive and backup
- **Amazon FSx**
  Launch, run, and scale a high-performance file system in a few clicks

The Business Value of Commvault on AWS

Study Demographics

IDC conducted eight in-depth interviews with Commvault on AWS customers, enquiring about their experience with the combined solution, the resulting benefits, and the progression of tracked metrics to provide a complex picture of the effects that implementation brings its users. The interviews aimed to capture both qualitative and quantitative data. Both data types are represented in the sections that follow.

The interviewed organizations varied to a substantial degree in their size, as measured by the number of employees as well as their annual revenue. Nevertheless, most of the organizations were either large or enterprise sized, with an average of 6,500 employees and average annual revenue of $2.19 billion. The reported numbers of employees ranged from 500 to 32,500, and the annual revenue figure ranged from $50 million to $15 billion. IDC spoke to organizations representing diverse industry verticals, namely financial services/banking, agriculture, manufacturing, pharmaceutical, and real estate. Four of the interviewed organizations were headquartered in the United States, three in Europe, and the remaining one in Thailand. Further information about the study demographics is provided in **Table 1.**

TABLE 1

Demographics of Interviewed Organizations

	Average	Median
Number of employees	6,500	2,800
Number of IT staff	560	200
Number of customers	200	90
Annual revenue	$2.19B	$247.50M
Verticals	Financial services/banking (4), agriculture, pharmaceutical, manufacturing, and real estate	
Countries	United States (4), Austria, Germany, United Kingdom, and Thailand	

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

The Choice and Use of Commvault on AWS

IDC asked the interviewed organizations to identify the initial concerns they aimed to address by implementing Commvault on AWS as well as share details about the process that led to the selection of the solution. With this white paper researching the joint benefits of the two solutions, the quotes present the organizations' answers pertaining to their decision to implement either Commvault, AWS, or both solutions. Cost, efficiency, and data management were some of the reasons organizations identified as pertinent for selecting AWS. The decisions driving the implementation of Commvault were closely tied to the organizations' need to improve their data management, security, and compliance efforts.

Organizations emphasized the need for a more secure and stable environment as the major drivers for selecting Commvault. Further:

Cost and efficiency with AWS, (banking):

"Our organization chose AWS because of its cost efficiency. Previously, our environment was all on premises. After performing a risk assessment, our organization decided to move to the cloud to align our business model with the way we store our data."

Scalability and data recovery with AWS, (agriculture):

"AWS offers the flexibility to scale up and scale down as we require. Our organization had some pain points that we aimed to address with AWS, for example, how quickly we could do data restorations and what's the best way to set up data recovery. AWS offered a great solution for these concerns."

Using Commvault before moving to the cloud, (financial services):

"Our organization implemented Commvault before going to the cloud. We used Commvault for onsite solutions. Commvault offered us a cost-effective way to simply scale up according to our infrastructure needs and perform backups in just a few clicks."

Decision drivers for Commvault, banking:

"Our organization first implemented a solution from a different vendor with AWS. After experiencing a security breach, we were unable to recover our data. We performed a risk assessment of the impact and decided to switch to a different vendor with the market reputation of addressing the problems we were experiencing, which, in this case, was Commvault."

Reasons for choosing Commvault, (agriculture):

"Before choosing Commvault, our organization performed a thorough market analysis. Commvault offered us a more cost-effective as well as beneficial solution. We were looking to solve the issues of minimizing unplanned downtime and protecting our environment in terms of security and compliance, data restoration, recovery, and monitoring."

The data in **Table 2** (next page) provides a look at the AWS environments that interviewed organizations are using Commvault cyber-resilience and data security solutions to manage, support, and secure. The average organization reported having 33 AWS EC2 instances, 191TB of storage, and 218 databases in the AWS cloud. On average, the interviewed organizations ran 105 applications in the AWS environment. The percentage of revenue supported in AWS environments remained steady across the interviewed organizations with an average of 60% and a median of 61%, with both numbers showing the importance of the AWS environments for which study participants use Commvault solutions.

TABLE 2

AWS Environments Supported with Commvault

AWS Usage	Average	Median
Number of AWS EC2 instances	33	15
Number of terabytes — AWS storage (Amazon S3, Amazon S3 Glacier, etc.)	191	90
Number of AWS databases (Amazon RDS, Amazon Aurora, etc.)	218	17
Number of applications	105	50
Revenue supported	60%	61%

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Business Value and Quantified Benefits of Commvault on AWS

IDC asked the interviewed organizations about the most significant benefits they gained by using Commvault on AWS. The reported benefits align very closely with the drivers organizations initially identified for implementing the solution. Organizations stated that they were able to better maintain the integrity of their data environments and, improve their system security and saw improvements in system stability as well as deriving benefits in the area of disaster recovery (DR).

Organizations also reported that Commvault on AWS made their data environments more predictable and reliable regarding backup and recovery efforts. Further:

Regulatory compliance with Commvault, (financial services):

"Starting in 2024, the regulations in our sector mandate an annual cyber-resilience test … Commvault could help us deliver early detection and security backups when it comes to ransomware attacks. Furthermore, should a security incident manifest, Commvault could provide fast data recovery, management, and backup automation. So, it's early warning, securing backups, faster recovery, and multiple uses."

System and data stability, (agriculture):

"With Commvault, we are able to meet our recovery time objectives, reduce production outages, and recover data for compliance purposes. Commvault helped us centralize and simplify our data backup and recovery efforts."

Operational risk, (manufacturing):

"Commvault helped us by providing the visibility of all potential vulnerabilities in one central location. From the ground up, it changed our operational risk landscape. Before, our organization was wide open for a cyberattack; the reduction in operational risk with Commvault is very substantial."

Risk reduction, (real estate):

"Commvault has reduced our recovery time from days to hours, and as a result of that, the eventuality of having to make a payment in case of a ransomware attack was eliminated. Our organization's overall risk metrics have decreased by 80%. Apart from risk reduction, Commvault also helped us with flexibility, integration capability, and application performance."

Data and System Security Improvements

IDC asked organizations to speak about the data and system security improvements they have achieved with Commvault on AWS. Organizations reported an overall improvement in the area of security, specifically gaining insights into the backup and data security processes.

Implementing Commvault on AWS also meant a reduced impact of cybersecurity threats that lead to a substantial reduction of annual costs associated with impactful cybersecurity incidents, such as ransomware payments. Further:

Ransom payment avoidance, (manufacturing):

"Our organization experienced a malware attack on a single server that, thanks to Commvault, we were able to isolate and completely neutralize. We restored the data, changed the passwords, and made sure it couldn't happen again. This took about six hours. For a different ransomware attack, we were able to repeat the same procedure and avoid paying any ransom. In the previous environment, a ransomware attack would spread like wildfire. By using Commvault, we are avoiding around $1.5 million per year just in ransom."

Awareness and visibility, (pharmaceutical):

"Commvault made our organization more stateful and aware. If a backup fails, we get immediate notifications. We have better visibility than we did before with all our different tools and providers. There is a 'single pane of glass' showing the whole picture regarding security in the organization."

Overall security improvement, (manufacturing):

"Our organization is now more secure and robust, and has better insights into our backups and data protection. We have a reduced threat vector for cyberattacks. We are able to recall data and organize testing and tabletops instantly. There is no area in the data protection realm that wasn't positively affected by the implementation of Commvault."

Impact of cybersecurity threats, (banking):

"Our organization registered three cybersecurity attempts, and their impact was low. Commvault provides isolation and ensures that data stays available. Those attempts were managed successfully by having Commvault."

Attack remediation, (financial services):

"Commvault gave us more confidence in the security space. We were able to reduce the threat footprint. For our organization, that means, in the case of a malware or ransomware attack, we can go 'back in time' and remove the threat. Commvault gave us a forensic capability, saving our organization time and avoiding business and end-user impact."

Backup and Recovery Improvements

The results presented in this section are related to the impact of Commvault on AWS on data backup and recovery capabilities. Organizations reported that the performance of their backup efforts improved substantially with Commvault on AWS. The average backup window length was reduced by 63.2% — from 7.6 to 2.8 hours (see **Table 3**). With Commvault on AWS, organizations saw 93% of their backups completed on target, compared with 66% in their previous environment. These benefits reflect reduced risk related to backups and were enabled by the backup teams being able to monitor the backup progress more efficiently while receiving a greater level of insight into the backup process, thereby gaining the ability to focus on long-term improvements of the backup approach and strategy.

TABLE 3

Data Backup Window Benefits

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
Average backup window	7.6 hours	2.8 hours	4.8 hours	63.2%
Backups completed on target	66%	93%	27%	28.8%

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Apart from backup process, organizations also reported improvements in the area of data recovery, which reflects their ability to better ensure business continuity with Commvault on AWS. The length of both the recovery time objective (RTO) and the recovery point objective (RPO) was significantly reduced. The average RTO length was reduced from 7.6 to 4.1 hours, resulting in a benefit of almost 50% (see **Table 4**). For the average RPO length, the reduction wasn't quite as substantial; nevertheless, the average organization was still able to see an improvement of 23.5%, resulting in an RPO of 9.6 hours. Organizations reported gaining a "forensic" level of capabilities, enabling them to detect and remediate incidents efficiently and speedily. Commvault on AWS enabled a fundamental change in organizations' threat and incident response with preventative testing, improved procedures, and response scenarios.

TABLE 4

Recovery Time Objective and Recovery Point Objective Benefits

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
Average RTO length	7.6 hours	4.1 hours	3.5 hours	46.7%
Average RPO length	12.5 hours	9.6 hours	2.9 hours	23.5%

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Data and Security Staff Benefits

Another area IDC asked organizations to speak about was the effect of the implementation of Commvault on AWS on data and security staff productivity. IDC primarily researched three groups of data and security staff whose benefits will be introduced separately, but the quotes presented in this section can and often do speak of data and security staff deriving benefits from Commvault on AWS as a whole. The three groups whose quantitative benefits are described in detail later are: data, backup, and recovery teams; compliance teams; and operational staff teams. Regarding the quantitative benefits, organizations spoke about increasing data and security teams' productivity by shifting their overall approach from a "hands on" approach to an approach based on monitoring the environment.

Organizations reported being able to focus more on security and its aspects, including the investigation of potentially adverse events, and carrying out security exercises such as preventative tests. Further:

Assurance, (financial services):
"The teams are able to work more efficiently on cloud deployment, data pipelines, migrations, and assurances. Backup assurance is something they couldn't do before, but now our organization is able to reduce risk in this way."

Prioritization, (financial services):
"Commvault enabled our data teams to focus on other tasks they couldn't attend to previously. These are mainly innovative and creative projects that they can prioritize."

Change in approach, (agriculture):
"Thanks to Commvault, the approach shifted from the teams being 'hands on' to adding value and monitoring the situation. This enables the organization to strategically plan test runs throughout the year and predict how we can restore data. In the previous environment, always doing manual backups prevented us from focusing on this."

More detailed security focus, (pharmaceutical):
"Security teams can be more focused on cyberprotection details, investigating backup failures, and monitoring potentially dangerous threats regarding log-ins. Commvault helps our organization maintain access to our key cloud capabilities."

Security exercise enablement, (manufacturing):
"The data and security team are able to focus more on the backlog of security and development tickets that we have. We have a backlog of tickets and dev requests. Commvault enabled us to focus more on prevention with such activities as tabletop exercises and red team testing. The teams are also able to focus more on career and personal growth."

Disaster recovery, (pharmaceutical):
"Commvault is an integral part of our organization's disaster recovery mechanism. It gives us confidence in this area and, according to our tests, expedites our DR response. Commvault reduces the inherent risk associated with DR for us."

The first of the three IT teams IDC researched separately to determine possible benefits was the data, backup, and recovery teams. The 14.50% efficiency shown in **Table 5** (next page) translates into a 9.7 FTE productivity gain for the average organization using Commvault on AWS. With IDC's $100,000 annual salary assumption, organizations derived a benefit in excess of $970,000 for their data, backup, and recovery teams by using Commvault on AWS. Much in line with the process improvements shown previously in **Tables 3 and 4,** data, backup, and recovery teams were able to approach their work tasks in a more holistic manner, enabling an improvement in time required for day-to-day activities and enabling a shift in focus to more strategic areas.

TABLE 5

Data, Backup, and Recovery Staff Benefits

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
FTEs required for equivalent environments	67.2	57.5	9.7	14.5%
Value of staff time required for equivalent environments	**$6,720,800**	**$5,750,000**	**$970,800**	**14.5%**

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

The second of the three researched IT teams was the organizations' compliance teams. The average compliance team realized a 25.6% gain in efficiency enabled by Commvault on AWS. With IDC's $100,000 annual IT staff salary assumption, the average organization realized a benefit of over $140,000 (see **Table 6**). Organizations reported that this compliance team productivity gain was enabled by proactive security testing, such as tabletop testing, and Commvault on AWS ensuring data jurisdiction consistency.

TABLE 6

Compliance Effort Staff Benefits

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
FTEs required for equivalent environments	5.5	4.1	1.4	25.6%
Value of staff time required for equivalent environments	**$551,250**	**$410,000**	**$141,250**	**25.6%**

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

The third and last of the IT teams IDC researched was the organizations' operational teams. IDC was able to determine that the average organization realized a 22.50% efficiency in this area, resulting in over $63,000 or 0.6 FTEs of equivalent staff time avoided for the average organization with a $100,000 salary assumption by IDC (see **Table 7,** next page). Operational teams were able to realize greater effectiveness for these teams through the simplification and automation of tasks enabled by the implementation of Commvault on AWS.

TABLE 7

Operational Staff Benefits

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
FTEs required for equivalent environments	2.8	2.2	0.6	22.5%
Value of staff time required for equivalent environments	**$282,810**	**$219,290**	**$63,520**	**22.5%**

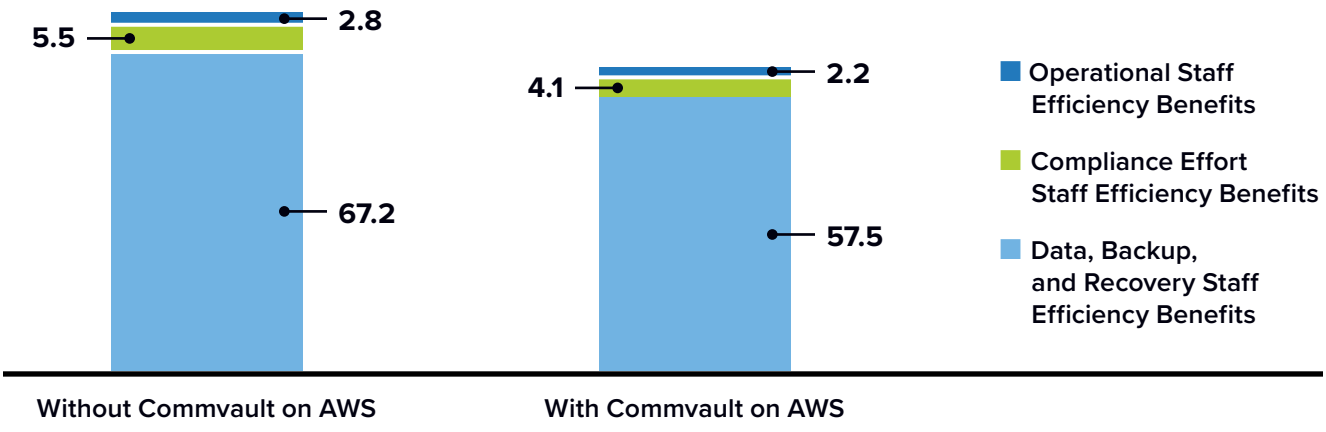
n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Figure 1 presents the data shown previously in **Tables 5–7**. In absolute terms, the 16% productivity gain is mostly driven by the data, backup, and recovery teams, with the other two teams achieving a higher productivity gain in relative terms. It's important to note that these finding don't indicate that the researched organizations dismissed 16% of their IT staff but rather that the staff is now enabled by the described improvements and productivity gains made by implementing Commvault on AWS to focus their time and resources on other tasks with a higher value-add.

FIGURE 1

Overall Sales Teams Efficiency

(Efficiency level in FTEs per organization)



n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

For an accessible version of the data in this figure, see Figure 1 Supplemental Data in Appendix 3.

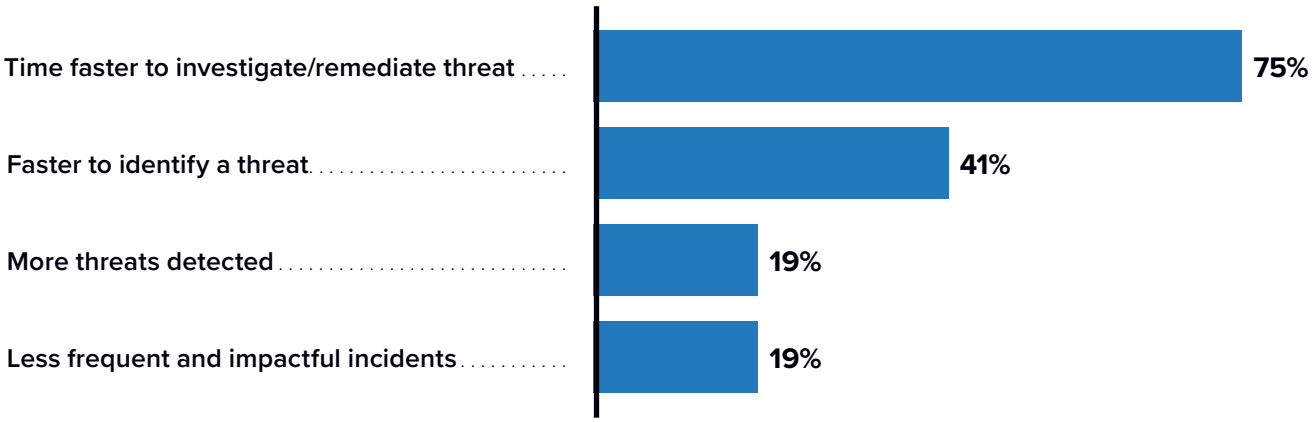
Threat Identification and Remediation Benefits

IDC asked organizations using Commvault on AWS to assess their security environment and performance with the help of KPIs and additional metrics that provide a thorough outlook on the enabled improvements in this area. Organizations reported that they were able to investigate and remediate threats 75.4% faster with Commvault on AWS. They were also 40.9% faster to identify them. The average organization was able to detect 19.4% more threats and register 19.2% less impactful security incidents (see **Figure 2**). Organizations realized these improvements owing to Commvault's comprehensive and easy-to-use monitoring system in addition to the creation of a robust security environment conducive to security procedures and other best practices discussed in this section.

FIGURE 2

Threat Identification and Remediation Benefits

(% of respondents)



n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

The findings presented in **Figure 2** and the previous text, along with other data acquired by IDC, were used to calculate the impact of security benefits in terms of cost avoidance. IDC was able to determine that the average organization saved over $80,000 annually in cyberinsurance payments, owing to a lower frequency of impactful security incidents and the overall greater robustness of the security environment. IDC also calculated that the average organization avoided over $484,000 annually in direct costs associated with impactful security incidents (see **Table 8,** next page). This stemmed from a greater resilience against threats that include, but are not limited to, ransomware attacks and associated payments.

TABLE 8

Direct Security Benefits

	Cost Avoidance Annually
Insurance payments savings annually	$80,900
Average impactful security incident avoidance benefit annually	**$484,600**

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

AWS and Commvault Integration Benefits

IDC researched the benefits study participants perceived as a result of integration between Commvault and AWS. Organizations reported that deploying both solutions in concert provides cost predictability and also improves user experience thanks to a single clear interface.

The uniqueness of the Commvault on AWS proposition in the market was also identified as a benefit by organizations. Further:

Costs and user experience, (financial services):
"There is a hybrid or aligned approach between Commvault and AWS that makes costs more predictable and the overall experience more user friendly."

Simplicity, (financial services):
"It would be hard to get a combination like this anywhere else in the market. One of the benefits is definitely the simplicity. Our organization could theoretically develop a similar solution natively, but taking into consideration the license costs and new hires needed, there would still be components missing."

Cost reduction, (agriculture):
"For a medium-sized enterprise, it's reducing the overall cost. Other benefits include the reduction of environmental management complexity and staff required for more value-added work, as well as the ability to support virtualized environments."

Single interface, (manufacturing):
"Having a single interface, where you can access both AWS and Commvault seamlessly, is the major benefit when talking about integrating these two solutions."

The data shown in **Table 9** provides insight into what benefits Commvault on AWS customers derived directly related to AWS Storage usage. Organizations reported being able to deploy new storage 37% faster and migrate workloads into AWS Cloud 44% faster. The average organization avoided spending close to $17,000 annually on database administration and consulting. These benefits were realized due to establishing a more scalable environment with the combined Commvault and AWS solution, which contrasted with previous solutions used by the interviewed organizations.

TABLE 9

Direct Security Benefits

AWS Storage Usage Benefits	Benefits
Faster to deploy new storage	37%
Faster to migrate workload to AWS Cloud	44%
Database administration and consulting costs avoided annually	**$16,600**

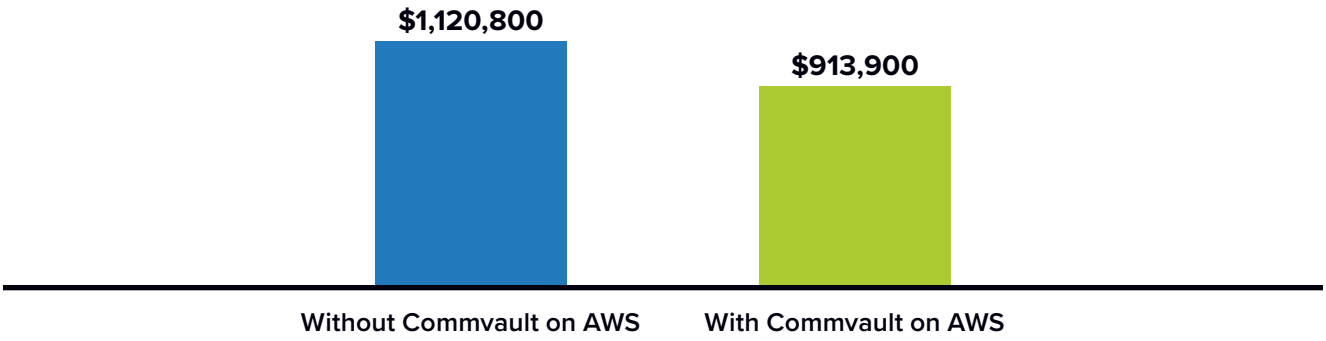
n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Organizations also talked about the savings they were able to realize in terms of their AWS storage and database environments. From the data gathered through the interviews, IDC was able to calculate that the average organization saved $206,000 in annual storage and database costs with AWS. The annual storage spending sank from $1.12 million to $913,900, resulting in a benefit of 18.5% (see **Figure 3**). These savings were mainly enabled by Commvault data management features, such as data deduplication and data compression, which allow study participants to make more cost-effective use of these AWS resources.

FIGURE 3

Spend on Storage and Database Savings

(Spend savings per year)



n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Unplanned Downtime KPIs

The last researched group of KPIs and benefits presented in this white paper is benefits related to unplanned downtime. With Commvault on AWS, organizations experienced 80.2% fewer unplanned downtime incidents, and their mean time to recovery (MTTR) was reduced by 55.6%. This improvement was enabled by Commvault on AWS providing a more stable and robust storage and data environment, including ensuring timely and full data backups (see **Figure 4**).

FIGURE 4

Unplanned Downtime KPIs

(% of respondents)

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

IDC was able to calculate the financial impact of the unplanned downtime reduction (see **Table 10**). From the average organization's standpoint, before implementing Commvault on AWS, unplanned downtime was responsible for 3.1 FTEs of productive time lost annually; with Commvault on AWS, this reduced to just 0.2 FTEs, resulting in a benefit of 93.30% or, in financial terms, avoiding a productivity loss of over $204,000 with an IDC assumed average $70,000 annual salary across the organization. Owing to Commvault on AWS, the net revenue loss caused by unplanned downtime was reduced by 88.40%. The average organization is now losing only around $9,000 annually in net revenue compared with over $80,000 prior to the implementation of Commvault on AWS.

TABLE 10

Unplanned Downtime Loss of Productivity and Revenue Avoidance

	Without Commvault on AWS	With Commvault on AWS	Difference	Benefit
Productive time lost per organization per year (FTEs)	3.1	0.2	2.9	93.3%
Value of productive time lost per organization per year	$219,100	$14,600	$204,500	93.3%
Revenue loss per year	**$80,700**	**$9,400**	**$71,300**	**88.4%**

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

ROI Summary

Table 11 (next page) presents the findings related to IDC's calculations of the three-year ROI analysis. IDC was able to determine that for the average organization, an investment in using Commvault cyber-resilience and data security solutions for their AWS environments brings a 309% ROI and a four-month payback over a three-year period. The average organization can expect a three-year sum of discounted benefits of $5.1 million with a three-year total investment sum of $1.2 million. These figures are also presented on a per AWS Storage terabyte basis, where one hosted terabyte with AWS corresponds to $26,700 in benefits and $6,500 in investments. IDC applies an industry standard 12% discount factor to account for the value of alternative investments over the three-year period.

TABLE 11

Three-Year ROI Analysis

	Per Organization	Per AWS Storage Terabyte
Discounted benefits	$5,103,800	$26,700
Discounted investment	$1,248,700	$6,500
NPV	$3,855,100	$20,200
ROI	309%	309%
Payback	4 months	4 months
Discount factor	12%	12%

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Challenges/Opportunities

Data security and cyber-resilience/recovery is a highly dynamic market with many different permutations of systems, services, and requirements. Although Commvault and AWS are among the largest in their respective markets, no vendor of any size can satisfy every customer requirement. Moreover, in collaboration arrangements between companies such as Commvault and AWS, the companies' development processes are independent of one another and may or may not sync up on any specific release or capability. While the two endeavor to meet their mutual customers' needs, there may be times when companies will need to wait on one for the support of the other.

It is also important for customers to understand that simply backing up to the cloud does not satisfy air-gap requirements for cyberprotection purposes. Additional steps must be taken to separate the data plane from the control plane for cloud storage to minimize the opportunity for attackers to compromise both on-premises and cloud backups. IT organizations will also need to use services such as Amazon S3 Object Locking to achieve immutability. IDC recommends cloud storage, including immutability options, as important components in cyberprotection strategies; these repositories can provide valuable protection. IT teams should use a layered approach to protection schemes that utilize other capabilities to assure data survival and integrity.

Conclusion

Finding the optimal cyber-resilience and data security solution is paramount for organizations, and IDC data shows that it will be the number 1 investment area for organizations in 2024–2025. IT leaders are constantly looking to enhance and improve both their resilience and their operational efficiency.

This study of Commvault and AWS illustrated that the combination is capable of delivering enviable results. The users we studied saw faster backups, shorter backup windows, and faster data restores. Sometimes, getting such improved results costs more money. In this case, users saved an average of $206,000 on AWS storage and achieved a 309% ROI over three years. To cap things off, these users saw a 22.5% reduction in FTE time required to manage the solution. While every situation is different, these results demonstrate the possibilities attained with Commvault and AWS.

Summary

The research conducted by IDC on Commvault on AWS implementation in various organizations revealed significant improvements in data management, staff efficiency, and data environment stability. The solution was chosen for its high degree of flexibility related to data infrastructure and reduction of storage costs. The study showed that organizations experienced major improvements in their backup and recovery efforts, productivity, and data compliance and security. The research also highlighted a 309% ROI and a four-month payback period over a three-year period. Other key findings include a 14.5% productivity gain for data, backup, and recovery teams; a 25.6% productivity gain f or compliance teams; and a 22.5% productivity gain for operational teams.

Appendix 1: Methodology

IDC's standard Business Value/ROI methodology was utilized for this project. This methodology is based on gathering data from organizations currently using Commvault on AWS to support and drive their sales activities.

Based on interviews with organizations using Commvault on AWS, IDC performed a three-step process to calculate the ROI and payback period:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Commvault on AWS.** In this study, the benefits included sales team productivity gains, higher net revenue, and other staff time savings and efficiencies.
2. **Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using Commvault on AWS and can include additional costs related to migrations, planning, consulting, and staff or user training.
3. **Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Commvault on AWS over a three-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For the purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of $100,000 per year for IT staff members and an average fully loaded salary of $70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

- Because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.
- IDC assumes a margin of 15% for revenue gains to calculate net revenue gains, which reflects the fact that many factors can influence an organization's ability to win new revenue.

Note: All dollar numbers in this white paper are in U.S. dollars.

Appendix 2: Quantified Benefits of Use of Commvault on AWS

Table 12 provides a summary of specific benefit calculations resulting from the deployment and use of Commvault on AWS. In the aggregate, this amounted to $2.12 million in total annual benefits. The calculations include a 3.4-month deployment time in the first year.

TABLE 12

Specific Calculations: Benefits of Commvault on AWS

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
Data, backup, and recovery staff efficiency increase benefits	14.5% more productive, 9.7 FTE gain, salary $100,000 per year	$914,000
Compliance effort staff efficiency	25.6% more efficient, 1.41 FTE gain, salary $100,000 per year	$132,900
Operational staff efficiency benefits	22.4% more efficient, 0.64 FTE gain, salary $100,000 per year	$59,800

Continued on the next page ➤

Continued from the previous page

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
Database administration and consulting costs avoided	$15,700 no longer paid in database and consulting-related expenses	$15,700
Cost savings compared with previous solutions benefits	$30,700 no longer paid compared with previous solution annually	$30,700
Unplanned downtime revenue loss avoidance	1.02 FTEs of productivity no longer lost annually, salary $70,000 per year	$67,100
Unplanned downtime loss of productivity avoidance	2.92 FTEs in productivity loss avoided, salary $70,000 per year	$204,500
Insurance payments savings	$76,000 average annual insurance payment savings by reported organization	$76,200
Impactful security incident avoidance savings	50% reduction in probability of impactful security incident per organization, with $4.39M per incident assumption	$456,300
Spend on storage and database savings	Average savings reported by organizations per year	$194,800
Total annual benefits with the use of Commvault on AWS	**$2.12M per organization**	

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

* Data includes 2.1-month, deployment time in year 1.

Appendix 3: Supplemental Data

This appendix provides an accessible version of the data for the complex figure in this document. Click "Return to original figure" below the table to get back to the original data figure.

FIGURE 1 SUPPLEMENTAL DATA

Overall Sales Teams Efficiency

	Without Commvault on AWS	With Commvault on AWS
Data, Backup, and Recovery Staff Efficiency Benefits	67.2 FTEs	57.5 FTEs
Compliance Effort Staff Efficiency Benefits	5.5 FTEs	4.1 FTEs
Operational Staff Efficiency Benefits	2.8 FTEs	2.2 FTEs

n = 8; Source: IDC Business Value In-Depth Interviews, February 2024

Return to original figure

About the IDC Analysts

Phil Goodwin

Research Vice President, Infrastructure Systems, Platforms and Technologies Group, IDC

Phil Goodwin is a research vice president within IDC's Infrastructure Systems, Platforms and Technologies Group, with responsibility for IDC's infrastructure software research area. He provides detailed insight and analysis on evolving infrastructure software trends, vendor performance, and the impact of new technology adoption. His focus is on multi-cloud data management, data logistics, on-premises and cloud-based data protection as-a-service, cyber protection and recovery, recovery orchestration, and more. Phil takes a holistic view of these markets, and covers risk analysis, service level requirements and cost/benefit calculations in his research. He also contributes regularly to IDC's CIO advisory practice.

More about Phil Goodwin

Ladislav Kinda

Consultant, Business Value Strategy Practice, IDC

Ladislav is a Consultant in the IDC Business Value Strategy Practice team. Ladislav conducts customized business value research and consulting projects for clients across various technology domains. His primary focus is assessing the return on investment (ROI) from their adoption of enterprise technologies. Ladislav's research delves into how organizations leverage digital technology solutions and initiatives to enhance efficiency and drive business growth.

IDC Custom Solutions

IDC Custom Solutions produced this publication. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis that IDC independently conducted and published, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. This IDC material is licensed for external use and in no way does the use or publication of IDC research indicate IDC's endorsement of the sponsor's or licensee's products or strategies.

IDC Research, Inc.
140 Kendrick Street, Building B, Needham, MA 02494, USA
T +1 508 872 8200

idc.com @idc @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. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives.