Analyzing the Economic Benefits of ScaleProtect with Cisco UCS

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Executive Summary

The unprecedented growth of data collected and stored by companies is only dwarfed by the ever-increasing amount that will be generated in the near future. Ever-changing regulatory requirements and growing sophistication in malicious attacks on data make traditional data protection methods obsolete. In this challenging environment, data protection managers are tasked with keeping data safe, available, and organized while limiting cost. It seems to present an unsolvable equation.

Commvault and Cisco have created a solution that is reframing the data protection industry. ScaleProtect with Cisco UCS helps eliminate silos of data by creating a scale-out infrastructure that provides the agility to succeed in a data-heavy marketplace. This solution lets companies easily scale as needed, all the while providing management tools that help drive complexity and risk out of the process.

ESG conducted research involving talking with customers who have experience with multiple data protection solutions, including ScaleProtect with Cisco UCS. The focus of these discussions was the ability of a data protection platform to help companies achieve business goals and hit service level agreements (SLAs). Additionally, ESG leveraged the insight of its internal data protection analysts, research team, and validation experience to create the content of this report.

All customers interviewed expressed a very high level of satisfaction with ScaleProtect with Cisco UCS. Topics that consistently came up were cost savings, a reduction in risk, and overall business enablement. Commvault and Cisco's solution gives companies the ability to treat stored data as a strategic asset while keeping it safe and available.



Introduction

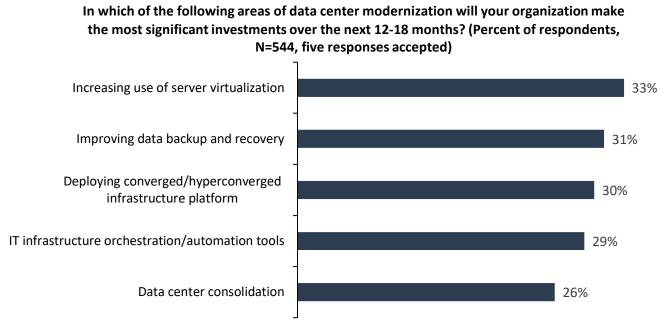
This ESG Economic Validation focuses on the quantitative and qualitative benefits organizations can expect from deploying ScaleProtect with Cisco UCS. ESG combined the insights gained through customer research, its internal industry analysts, and existing case studies to create this comparison of ScaleProtect with Cisco UCS versus data protected with traditional data management solutions.

Challenges

The onslaught of data that companies face today is increasing in both size and complexity at an unprecedented pace. ESG estimates that 90% of all data that currently exists was created in the past two years. Projecting forward, this means that in the year 2021, only 10% of the data needing to be stored and accessed exists today. Additionally, the increased diversity of data sources and data types being collected brings constant change to the business requirements of data management. Storing and protecting this data is a major challenge for most organizations, often leading to the creation of data protection silos. Although these silos are usually accessible in times of crisis, these rapidly growing pools of data also contain the industry and customer trends that allow businesses to thrive. A company that solves the labyrinth of intelligent data storage while providing safe, timely, reliable, and accessible backup and recovery will have a competitive advantage.

ESG research shows that one of the most important initiatives driving IT spending in the area of data center modernization is improving data backup and recovery (see Figure 1). And deploying converged/hyperconverged infrastructure platforms and IT infrastructure orchestration/automation tools were the third and fourth most-often cited initiative driving *overall* technology spending. These latter two initiatives often go hand-in-hand when addressing the challenges of protecting modern data workloads and improving backup and recovery.

Figure 1. Top Five Data Center Modernization Spending Priorities



Source: Enterprise Strategy Group

ESG spoke with customers who were tasked with both protecting data and making it readily available for recovery and other business-critical workloads. The focus of these interviews was the ability to achieve service level agreements (SLAs) in an area that is increasing in complexity each year.

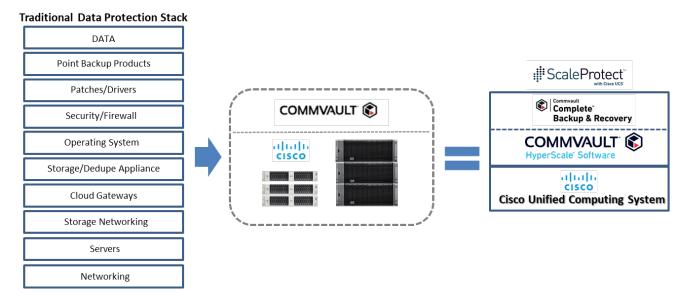
¹ Source: ESG Master Survey Results, <u>2018 IT Spending Intentions Survey</u>, December 2017.



The Solution: ScaleProtect with Cisco UCS

ScaleProtect with Cisco UCS bridges the benefits of onsite data and the scalability of cloud-based solutions, all while using industry-standard x86 servers. With this single platform, Commvault and Cisco offer industry-leading global data protection in a hybrid environment, providing the best of onsite and cloud storage. This solution simplifies the data protection stack and enables seamless scale and non-disruptive upgrades. Unlike a scale-up dedicated backup appliance, which is limited in capacity and performance by the capability of a pair of controllers, ScaleProtect with Cisco UCS can be scaled to multiple petabytes of usable storage while delivering linear performance. It can do this because when nodes are added to a cluster for additional capacity, so is CPU, memory, networking, and backup software. Figure 2 shows a comparison of managing data in a traditional environment versus using a ScaleProtect with Cisco UCS solution. Deploying ScaleProtect with Cisco UCS allows companies to focus energy into strategic and revenue-producing activities instead of constantly juggling resources that often create even more silos of data.

Figure 2. Comparing Traditional Data Management with ScaleProtect with Cisco UCS



ESG Economic Validation

ESG's Economic Validation process is a proven method for understanding, validating, quantifying, and modeling the economic value propositions of a product or solution. The process leverages ESG's core competencies in market and industry analysis, forward-looking research, and technical/economic validation. ESG conducted interviews with end-users to better understand and quantify how scale-out data protection has impacted their organizations, particularly in comparison with previously deployed and/or experienced solutions.

In addition to having experience with on-prem and cloud-based backup and data management solutions, some of the customers interviewed had recently migrated their data environments to ScaleProtect with Cisco UCS and gave detailed feedback on ongoing administration differences between the environments. The qualitative and quantitative findings were used as the basis for a simple economic model comparing the expected costs of ScaleProtect with Cisco UCS against competitive offerings.

ScaleProtect with Cisco UCS Economic Value Overview

ESG's economic analysis revealed that a deployment of ScaleProtect with Cisco UCS can provide significant benefits in cost savings, risk reduction, and business enablement when compared with traditional backup solutions. ESG found the top benefits of ScaleProtect with Cisco UCS fell into these categories:



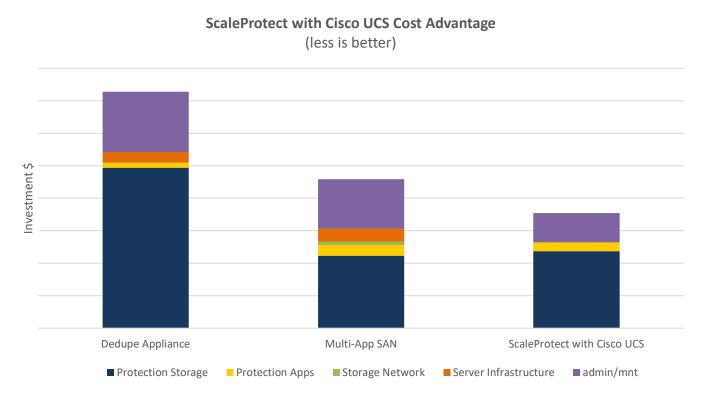
- Cost savings—Organizations switching to ScaleProtect with Cisco UCS reported a net savings of 52% when compared with dedicated deduplication appliance solutions, and 24% when compared with multi-app SAN deployments.
- **Risk reduction**—Customers report a remarkable improvement in the ability to access and restore usable data in downtime situations and strong improvements in responding to audit/compliance requests. ScaleProtect with Cisco UCS solutions have helped customers increase the frequency of backups by up to 340%.
- **Business enablement**—The delivery of high-quality IT services aligned to an organization's SLAs is a key element to the success of a business. In fact, 48% of respondents to an ESG research survey identified improving SLAs as the top data protection mandate from IT leadership.² Customers report that the scalability and agility of ScaleProtect with Cisco UCS enables organizations to significantly improve the ability to meet or exceed their published SLAs.



Cost Savings

ScaleProtect with Cisco UCS utilizes easy-to-procure, scale, and maintain X86 servers. As shown in Figure 3, customers reported that when they moved to ScaleProtect with Cisco UCS, they recognized the following cost benefits:

Figure 3. ScaleProtect with Cisco UCS Cost Advantage



Source: Enterprise Strategy Group

• Reduced spending on hardware—ScaleProtect with Cisco UCS customers report a 53% savings in hardware and infrastructure required for data management compared with their old environments. Not only does shifting to industry-leading X86 servers in a scale-out cluster infrastructure bring a monetary benefit, but also the simplification of moving to this type of environment reduces the need for multiple vendors and dramatically shortens the time required for planning and incident/disaster recovery remediation.

² Source: ESG Master Survey Results, <u>2018 Data Protection Landscape Survey</u>, November 2018.



- Lower IT administration costs—Customers are able to reduce their IT administration costs by up to 51% by moving to a ScaleProtect with Cisco UCS solution. These savings stem from a dramatic reduction in the time needed for general administration and specific tasks including reporting, provisioning, and managing storage. They also reported a 58% reduction in the time needed to search for data and recover data.
- Reduction in downtime—ESG research shows that downtime can result in a direct loss of revenue, loss of customer confidence, missed business opportunities, and diversion of resources from long-term or business-critical projects.³ The ScaleProtect with Cisco UCS scale-out architecture enables resources to be easily moved around the cluster to provide non-disruptive maintenance. Auto load-balancing of policies allows jobs to be dynamically reassigned to different media agents within the cluster in the event of a failure, and unlike scale-up architectures, as the ScaleProtect with Cisco UCS infrastructure grows in storage capacity, so does the compute and memory.



Data protection means that companies must do everything reasonably necessary to ensure the safety and availability of data. Part of that is identifying and mitigating risks to data integrity. Companies that adopt ScaleProtect with Cisco UCS have found their ability to reduce risk is far beyond what they had in their previous environment.

- Level of assurance in the completeness of backup jobs—Everyone who has been in data management long enough has a story about frantically implementing a recovery plan, only to realize that the data they were expecting to recover either didn't exist or was from a recovery point that provided little value. ESG has found that companies that adopted ScaleProtect with Cisco UCS were able to increase the frequency of backups by up to 340%. Additionally, the reporting capabilities of ScaleProtect with Cisco UCS give a level of assurance of exactly what data is backed up, and when it was last recorded.
- Reduced complexity Complexity and efficiency are often diametrically opposed when it comes to technology. ESG research reveals that 68% of organizations report that their IT environments are more complex than they were two years ago (see Figure 4).⁴

"The thing that keeps us up at night is the fear of not having the correct data when recovery is needed. Moving to ScaleProtect with Cisco UCS allows us to assure our business leaders that we are proactively working to protect our data. In the past, we spent most of our time in a reactive mode."

When asked why IT complexity is increasing, their top three most-cited responses were higher volumes of data, greater numbers and variety of endpoints, and greater numbers and variety of applications. When the volume of production data and number of applications and devices increases, so do the demands on the data protection environment.

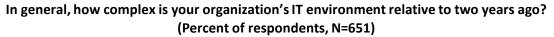
Compounding these challenges, the data and applications that need protection now live across IT environments, including in the corporate data center, on the edge in remote or branch offices (ROBO), and in multiple clouds. Customers report that ScaleProtect with Cisco UCS helped them dramatically reduce complexity in their data management operations. This simplification has allowed more effort to be put into innovation and deriving value out of stored data.

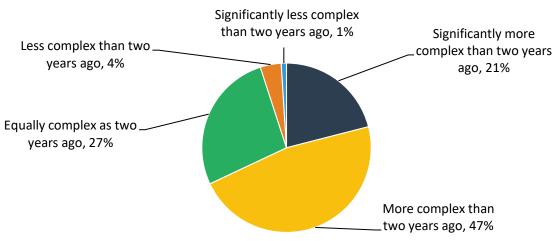
³ Source: ESG Master Survey Results, *Real-world SLAs and Availability Requirements*, May 2018.

⁴ Source: ESG Master Survey Results, <u>2018 IT Spending Intentions Survey</u>, December 2017.



Figure 4. Change in Level of IT Complexity





Source: Enterprise Strategy Group

• Integrity of data for audits/compliance—ESG has found that 43% of companies have been audited between one and five times in the past five years, with another 33% seeing between six and ten audits. ⁵ Of those companies, 58% have failed part or all of an audit due to data access or retention issues. Moving to ScaleProtect with Cisco UCS not only eliminates most of these access challenges, but also dramatically reduces the time and manpower needed to locate requested data.



Customers often keep their backup data locked in silos either to save money or because their size requirements have outpaced their ability to grow one data lake large enough to contain their backed up data. Using ScaleProtect with Cisco UCS, customers report the improved ability to access and pull usable data from their stored backups:

- Improvement in meeting SLAs—In a recent ESG data protection survey, 48% of respondents cited improving SLA performance as a top mandate from their IT leadership. ESG analysts have found that companies that deploy ScaleProtect with Cisco UCS are able to increase their performance toward SLAs significantly. This improvement in the delivery of IT services helps improve employee productivity and leads to the generation of revenue that otherwise would not exist.
- Ability to pull working data from backup store—Data may be the most valuable asset a company has, if it can be accessed and mined. Data inflection points have increased considerably over the past few years; this means that the sheer volume of protection data eliminates its usefulness to unorganized organizations. ScaleProtect with Cisco UCS

Increasing SLA performance can have a dramatic impact on the bottom line of a business, from reducing costs and saving manhours to recovering sales and pushing the profitability margin. The larger the staff or number of transactions, the bigger these savings become.

⁵ Source: ESG Master Survey Results, <u>2018 Data Protection Landscape Survey</u>, November 2018.

⁶ ibid.



allows for the collection and storage of ever-growing amounts of data while keeping that data accessible to help establish trends and opportunities that fuel company growth.

• Reduced end-user downtime—Every data manager knows end-users lose data. They only seem to lose data when their deadline is looming and the financial impact to the company is large. The process of requesting a restore of data often takes hours to fulfill, proves confusing, and is considered a last resort. Often, the lost data is considered gone forever by the end-user and it must be recreated, resulting in wasted man-hours and missed opportunities. Customers report that ScaleProtect with Cisco UCS has reduced the time needed to recover lost data and virtually eliminated cases where data recovery is limited by infrequent backups.

The Bigger Truth

Data protection and the retention of that data is often thought of as an insurance policy kept until a loss requires its restoration or an audit necessitates pulling information out of the store. The exponential increase in the quantity and density of data being protected over the past few years has made basic storage the key focus of data managers in a traditional environment. Efforts focus on the elimination of duplicate information to squeeze out costly redundant storage and methods to connect disparate silos of data into one accessible data store.

ScaleProtect with Cisco UCS provides a paradigm shift by giving customers substantial scale-out flexibility while keeping data accessible, reliable, secure, and manageable. Recovery time for end-user data requests is reduced from multiple hours in traditional environments to minutes with ScaleProtect with Cisco UCS. Data management tasks are dramatically reduced and the ability to achieve service level agreements is increased significantly. What was once a collection of data silos is now managed in a way that makes secondary data available and valuable as a business asset.

Ninety percent of the data that will exist in two years does not exist today. The tasks required of an enterprise data manager may not seem winnable considering the onslaught of data and constant introduction of new data sources and types. ScaleProtect with Cisco UCS empowers data managers with the capabilities and tools to take data that was once a burden and turn it into an asset to help companies achieve business goals.

ESG talked to customers and industry experts to understand the challenges faced with storing and accessing data and the impact of different data management solutions. ESG found that customers who deployed ScaleProtect with Cisco UCS were able to reduce costs, reduce risks, and shift their views on their expanding data lakes to start using them as a business tool. ESG strongly recommends that any company challenged with data management consider ScaleProtect with Cisco UCS.

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