Executive Summary

With each advance in technology comes a new level of complexity. This complexity adds to the challenge of collecting, securing, and backing up data and working environments. Unfortunately, most gaps in data protection plans are not uncovered until the time comes to restore information in a timely manner if it is possible to even restore.

Human error becomes more likely with each injection of complexity into an IT system. Even worse, the threat of sabotage and ransomware attacks is increasing in both frequency and sophistication. The result, for the teams trying to protect and back up data, is a backup strategy that may not offer the level of assuredness in protection, governance, and continuity that is required by an organization’s leadership.

Dell Technologies has developed Dell APEX, a portfolio of as-a-service IT offerings that brings top-of-the-line on-prem, cloud-based, and hybrid capabilities and, more importantly, the expertise to help companies best align their technology spending with their business requirements.

ESG has conducted an economic analysis on APEX offerings—specifically, Dell APEX Backup Services—and found the solution to be extremely effective in helping companies by providing a data protection platform that offers the right level of protection to match the company’s needs. ESG studied the capabilities of APEX Backup Services, interviewed APEX Backup Services customers, used the insights of our internal analysts, and reviewed existing material and case studies. ESG found that APEX Backup Services customers realized substantial benefits in cost efficiency, FTE efficiency, and reduced risk. This report details ESG’s findings.
Introduction

This ESG Economic Validation focuses on the quantitative and qualitative benefits organizations can expect from shifting their current data protection solution to Dell APEX Backup Services to increase the assuredness of backup operations, shift the onus of backups away from their FTEs, and better control the costs of backup services. ESG has studied APEX—specifically, APEX Backup Services—and found that it can help alleviate many of the challenges that organizations can face while helping them shift FTE focus to activities that better help IT align with business initiatives.

Challenges

Backups used to be simple. Companies could just make sure to have duplicate copies of everything, then restore everything if something went wrong. Modern environments have made simple backups seem impossible. In recent years, the location of data has morphed into hybrid environments, the density of data has increased each year, and there has been a constant introduction of new data types and sources and a dramatic shift in data from “something we store” to “something that we analyze to pull business value and trends.”

A common answer to backing up today’s complex environments has been to shift back to the cloud. This initially seems to provide an effective data protection solution; however, this cloud-based backup brings challenges of its own. In a recent ESG study of 376 respondents, organizations that rely on cloud-based data protection services list security and privacy concerns (38% of respondents), network connectivity and costs (27%), and a lack of cloud skills and IT expertise (27%) as among their biggest cloud-based data protection challenges. When comparing results between 2019 and 2021, two challenges show the greatest jump in level of concern: a lack of cloud skills and expertise and concerns around data sovereignty (see Figure 1).1

Figure 1. Challenges with Cloud-based Data Protection Services (Top 7 Categories Shown)

In general, what are the biggest challenges or concerns your organization has with cloud-based data protection services?

<table>
<thead>
<tr>
<th>Category</th>
<th>2021 (N=376)</th>
<th>2019 (N=350)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security/privacy concerns</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Network connectivity and costs</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>Lack of cloud skills/expertise/training across IT</td>
<td>27%</td>
<td>21%</td>
</tr>
<tr>
<td>Volume of data to be moved to and stored in the cloud</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>Data sovereignty/location concerns</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>Compliance concerns</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Concerns that IT staff would be giving up too much control to vendor/cloud providers</td>
<td>26%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: ESG, a division of TechTarget, Inc.

Many organizations have grown in complexity in terms of users, data, locations, and disparate systems, to the point that traditional backup solutions alone can’t provide the level of data protection required. Cloud-based solutions provide interesting capabilities but can quickly become complex and costly.

**The Solution: Dell APEX Backup Services**

APEX Backup Services is a hosted data protection solution delivered in APEX’s as-a-service model. APEX Backup Services has been designed to provide industry-leading data protection solutions that not only help companies navigate the challenges associated with modern backup, but also simplify the entire process to ensure that data is always protected, even in the most complex environments.

APEX Backup Services is a key component of the Dell APEX portfolio of offerings. ESG has recently conducted an economic validation of APEX as-a-service. To view that analysis, visit this link.

As seen in Figure 2, APEX Backup Services protects SaaS applications, hybrid workloads, and a wide variety of endpoints in a way that simplifies the complexity of modern infrastructure. APEX Backup Services is highly performant, infinitely scalable, and more importantly, exceptionally secure.

**Figure 2. Dell APEX Backup Services**

---

**ESG Economic Validation**

ESG completed a quantitative economic analysis of APEX Backup Services, focusing on the impact that the solution can have on an organization’s ability to meet technical and business goals. 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 in-depth interviews with end-users to better understand and quantify how APEX Backup Services has impacted their organizations, particularly in comparison with previously deployed and/or experienced solutions. The qualitative and quantitative findings were used as the basis for an economic model comparing the expected costs of on-premises and cloud-based managed backup solutions to APEX Backup Services.
APEX Backup Services Economic Overview

ESG’s economic analysis revealed that organizations that utilize APEX Backup Services can realize substantial benefits in categories that include:

- **Cost Efficiency** – Customers who adopt APEX Backup Services find their overall backup costs lower when compared to their previous backup ecosystem and realize recognizable benefits in APEX’s predictable consumption-based pricing model.

- **Agility** – The powerful simplicity that APEX Backup Services provides allows both IT and business FTEs to better focus on driving initiatives that are core to their company’s success.

- **Reduced Risk** – Too often, in traditional data protection scenarios, recovery events are met with the stark realization that data protection plans can’t meet the complexity of an ever-changing environment. Customers that were interviewed shared with ESG that they had a level of “assuredness of recoverability” with APEX Backup Services that was not possible in their previous systems.

**Cost Efficiency**

Effective data protection is not about finding the lowest cost solution, it is about finding the best alignment between business needs and technical capabilities. ESG created a financial model, interviewed customers, and reviewed Dell-provided guidance and found that APEX Backup Services provided exceptional mapping between dollars spent on backup services and capabilities delivered. Areas that positively impact this mapping include:

- **Consumption-based costing** – When compared to the stair-step model of CapEx backup or the complexity of planning and utilizing cloud backup, APEX Backup Services shines in the ability to reduce the money that would otherwise be squandered on overprovisioning.

- **Granularity in costing** – APEX Backup Services provides a menu-like list of capabilities. One customer shared, “The flexibility in the APEX offering allowed us to pick the capabilities we needed and not pay for those that weren’t relevant to our success. This allowed us to pay for only what fits our organization.” Additionally, customers reported that the clear and simple billing of APEX Backup Services allows IT to bill internal groups for services. In the past, breaking down backup costs was too complex.

- **Storage efficiency** – The intelligence built into APEX Backup Services, combined with the expertise of the APEX team, leads to a data protection plan that minimizes the amount of storage needed for an effective backup strategy, all while increasing the frequency of backups.

“APEX Backup Services provides so much functionality and protection that it is hard to compare its cost to our previous solution, but when you look at how APEX enables our employees to work more effectively, it really reduces our TCO.”
Economic Validation: Analyzing the Economic Benefits of Dell Technologies APEX Backup Services

“Reduced FTE costs” – In the ESG/customer interview sessions, we asked customers to share how the shift to APEX has changed their IT staff. One customer told us, “Our people now work on more strategic things instead of looking at blinking lights and combing backup logs. This has allowed us to work closer with our business units and find ways to use our technology teams to better support revenue-generating tasks.” ESG also found a change in the impact that backup services had on end-users. When studying the as-is environment before APEX, we uncovered examples where workers had their productivity negatively impacted due to either hindered workflows or intrusive background tasks associated with backup. We found these issues eliminated with APEX.

• Downtime avoidance – The reduction of downtime events, both planned and unplanned, saves both IT dollars and lost productivity hours of those creating revenue. ESG analysis shows that APEX Backup Services can eliminate up to 90% of instances where data is non-recoverable and reduce the time to recovery by up to 75%. In our sample company with 100 TB of backed-up data, this equates to over 850 recovered hours of recovered end-user productivity.

Agility

APEX Backup Services changes the way that organizations can approach data protection. When interviewing customers for this analysis, ESG heard stories about a shift in IT mindset from “How can we protect it?” to “What can we enable?” when moving to APEX Backup Services. Some of the supporting reasons include:

• True SaaS service – The elimination of the hardware and software associated with traditional backup removes the burden of base-level backup management. All the planning, implementation, and management tasks are handled by Dell services in the AWS cloud. There are no appliances or on-prem hardware needed to facilitate APEX Backup Services.

• Flexibility and integrations – Dell APEX Backup Services offers a comprehensive list of integrations for services such as Microsoft 365, Google Workspace, SFDC, mobile, and with RESTful APIs that facilitate integration with more third-party applications.

• Instant and infinite scalability – With APEX Backup Services, you can buy whatever capacity and level of service matches your need and almost instantly add new capacity when the demand arises. Additionally, the challenge of procurement that has created artificial stalls in enabling growth for many companies is eliminated with APEX. One customer shared, “Before APEX, it took me up to 10 months to get a switch ordered and delivered for my backup system. With APEX, these supply chain challenges were immediately alleviated.”

• Expert level guidance – IT expertise is expensive, hard to find, and, even worse, hard to keep. This results in too many IT decisions being made by inexperienced employees. APEX services are backed by Dell’s experts in hardware, software, and services. During customer interviews, this was explained to ESG as follows: “With APEX, I

“I can’t afford to pay a high-end security analyst $200K per year, but for a fraction of that cost, I get experts from Dell providing that level of thought into our data protection systems.”
can hand off the task of backing us up. They found data that I didn’t know existed and made sure we were protected. This allowed us to shift our focus away from very manual backup tasks and opened us up to work on more strategic projects, greatly improving our overall job satisfaction.”

**Reduced Risk**

Features and functionality don’t matter if a data protection solution can’t provide security in backups and assuredness in restorability. ESG studied APEX Backup Services and found that the end result provided exceptional data protection in all reviewed scenarios. Some of the functionality that reduced risk includes:

- **Speed to protected state** – Initial deployment of APEX Backup Services is extremely efficient. Customers interviewed described the process as easy and much faster than expected. Additionally, the Dell discovery process was much more inclusive in finding all important data than their existing systems and helped ensure that all important data was now protected.

- **Assuredness of recoverability** – Backup only matters if data can be effectively restored when needed. One customer shared, “We tested recovery with APEX Backup. In our test, we had a specific critical service restored in less than 4 hours. This was impossible in our old environment; it would have taken us 48-72 hours.” ESG reviewed the restore process and found it easy to understand, while being very granular in the ability to restore what specifically was needed.

- **256 bit AES encryption** – While many cloud SaaS vendors simply rely on the certifications that the CSPs provide for the infrastructure as their security model, APEX Backup Services has gone above and beyond, achieving compliance and attestations for cloud services. APEX Backup Services has ongoing third-party penetration testing conducted to identify any security vulnerabilities and ensure the highest level of security compliance.

- **Planning expertise** – Many companies only realize their backup systems are limited when a failed restore event takes place. The onboarding and planning process to migrate to APEX Backup Services was highlighted as a strength during customer interviews. One customer shared, “Our APEX backup now includes data that we never knew existed from a data protection standpoint. It is important to our organization but was never included in our past backups. We are better protected because of APEX.”

- **Ransomware protection** – Ransomware attacks are increasing in frequency and sophistication. A recent ESG research study on ransomware found that 79% of organizations surveyed had experienced a ransomware attack in the previous 12 months, with 73% reporting that at least one attack was successful in disrupting business. Of those who were successfully attacked, 56% paid a ransom.² Even worse, of those that paid a ransom, 87% said they experienced additional extortion attempts or fees beyond the initial ransom demand.³ The answer is not how to pay ransom more effectively, it is to develop a solution that can restore a system in the event of an attack. APEX Backup Services has capabilities to isolate data from potential attacks and technology in place to provide accelerated ransomware recovery in the case of a ransomware event.

---

The Bigger Truth

Digital transformation is a journey that allows organizations to maximize the value of rapidly changing technology. These changes enable new opportunities and can facilitate flexibility when outside influences change the rules of business. However, with change comes complexity and risk.

As organizations become more data-centric, archiving data in a way that is secure and recoverable is an immense challenge. Systems are complex and hard to find, expertise is costly, and far too often holes in a disaster recovery plan are uncovered after it is too late.

Dell Technologies has created APEX, an as-a-service portfolio of offerings that removes the burden of planning, procurement, management, and monitoring of a wide range of IT capabilities. For this analysis, ESG specifically studied APEX Backup Services, and the impact on an organization’s ability to reach business and technology goals when deploying APEX Backup Services.

ESG interviewed APEX Backup customers and found that, while the solution was extremely cost-effective, cost was not the key driver in their decision to change from their old backup system. The challenges of finding expertise, managing backup systems, and being able to assure senior leadership that data was secure and quickly recoverable drove them to APEX.

ESG created a model that studied both quantitative and qualitative benefits and found that APEX Backup Services directly map to the challenges that cause customers the most pain while enabling a new level of capabilities that extend the value of backup services far beyond what they can have in a traditional backup environment.

ESG highly recommends that organizations explore Dell Technologies APEX offerings, and, specifically, APEX Backup Services, to see how professionally run services can change their organization’s technology plans.

“APEX Backup Services gives us peace of mind. I can put our leaders at ease and assure them that we are protected like never before.”