

ESG Research Insights Brief

Enabling IT Transformation with Modern Data Protection Strategies

The Quantified Benefits of a Comprehensive Data Protection Strategy

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Introduction

IT Transformation is a concept that resonates with companies even more now than it did 12 months ago. It sounds like another current term, “digital transformation.” But in fact, *effective digital transformation doesn’t happen without IT Transformation.*

A company that undergoes IT infrastructure transformation no longer has to rely on rigid, manual, siloed, legacy technologies. It sees a boost in IT operational speed, efficiency, scale, and cost effectiveness—tasks are automated, processes streamlined, and resources are freed up. Those IT-level improvements fuel a larger-scale digital transformation, allowing the company to thrive in today’s digital economy. It is able to out-innovate, out-think, and out-pace its competitors—ultimately becoming the disruptor, not the disrupted.

It is possible to categorize a company’s degree of IT Transformation according to how extensively it has adopted:

- **Modernized data center technologies**—e.g., modern data protection solutions, software-defined networking and storage, server virtualization, scale-out and converged/hyper-converged infrastructure and All-Flash storage.
- **Automated IT processes**—e.g., delivering IT as a service (ITaaS) in a cloud operating model for cost transparency, efficiency, and responsiveness, automating infrastructure configuration and provisioning, and enabling self-service capabilities to end-users.
- **Transformed organizational dynamics**—e.g., regularly inspecting IT outcomes for effectiveness, and making sure that the IT group has opportunities to contribute proactively to business-strategy decisions.

A direct, measurable relationship exists between IT Transformation and agility and responsiveness, spending efficiency, innovation, time to market, stakeholder satisfaction, and competitiveness (see Figure 1).

Figure 1. IT Transformation Outcomes


Source: Enterprise Strategy Group

ESG was able to establish these correlations by conducting a survey commissioned by Dell EMC and Intel of 4,000 IT executives from private- and public-sector organizations across 16 countries.¹ All respondents were familiar with their organizations' IT modernization achievements and plans. ESG asked these respondents more than 60 questions about their IT environments and processes. Based on their responses, ESG ascribed an IT Transformation maturity score to each respondent's organization. ESG then grouped organizations by maturity score into one of four categories: *Legacy*, *Emerging*, *Evolving*, and finally *Transformed*. Only 6% of organizations achieved a Transformed ranking, although 81% of all respondents agreed their company will not be competitive if they do not embrace IT Transformation.

To learn more about this research, read [ESG's report here](#).

How Does Modern Data Protection Facilitate IT Transformation Maturity?

As organizations modernize their approach to IT generally and data center technologies specifically, data protection strategies, tools, and processes must evolve in a commensurate fashion. This necessity is magnified by data's continuously escalating growth rate, expanding mobility, and—perhaps most importantly—increasing intrinsic value. In a digital business, the heterogeneity of workloads, service levels required, and consumption models that organizations must provide precludes a “one size fits all” approach and demands that the proper solution be deployed to fit the unique needs of each environment. As such, a modern, comprehensive data protection strategy is necessary to support the transformation

A Modern Data Protection Strategy Supports IT Transformation

Modern data protection has been shown to be a part of many IT Transformation initiatives. *Transformed* organizations adhering to a modern, comprehensive data protection strategy excel, in that:

- *Transformed* IT organizations were nearly **10X** more likely to have invested in data protection solutions to cover a broad range of environments—from cloud, to on-premises, to endpoints.
- They were **13X** more likely to offer well-established self-service for data protection management.
- They were nearly **2X** more likely to have exceeded their revenue goals in 2017.
- They recovered their VMs **31%** faster than *Legacy* companies.
- They were **14%** more likely to hit their recovery targets.
- They were **8X** more likely to believe they are in a very strong competitive position (56% versus 7%).

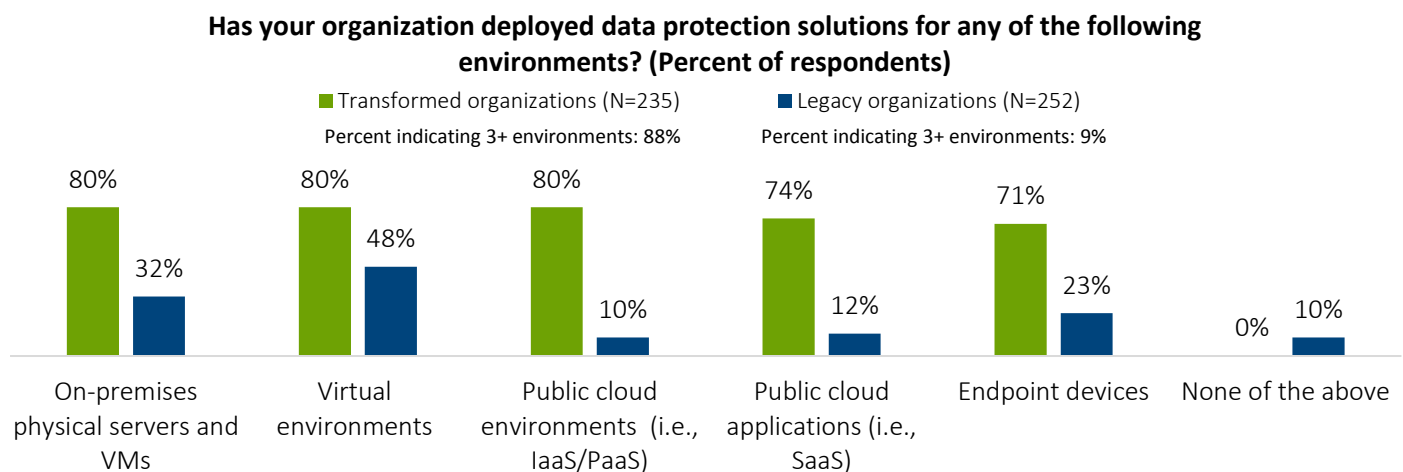
¹ Source: ESG Research Insights Paper, [Research Proves IT Transformation's Persistent Link to Agility, Innovation, and Business Value](#), March 2018.

of IT. This should include solutions from backup to availability to archive, all of which should be validated against workload requirements and the ways they are run or accessed, from on-premises physical and virtual environments, to hybrid and public cloud services (i.e., SaaS and IaaS) and endpoint devices.

Taking a Comprehensive Approach to Data Protection

In order to establish the scope of the typical data protection landscape, respondents were asked about the types of environments they are tasked with protecting, as well as the solutions used to achieve that end. As far as the types of environments protected, the vast majority of *Transformed* IT organizations report protecting at least one of the environment types listed (see Figure 2). In terms of the number of different environments protected, *Transformed* organizations are nearly ten times as likely to have invested in data protection solutions to cover a broad (i.e., three or more) range of environments—from on-premises, to public cloud services, to endpoint devices (88% versus 9%).

Figure 2. *Transformed* Companies Protect a Broader Range of IT Environments



Source: Enterprise Strategy Group

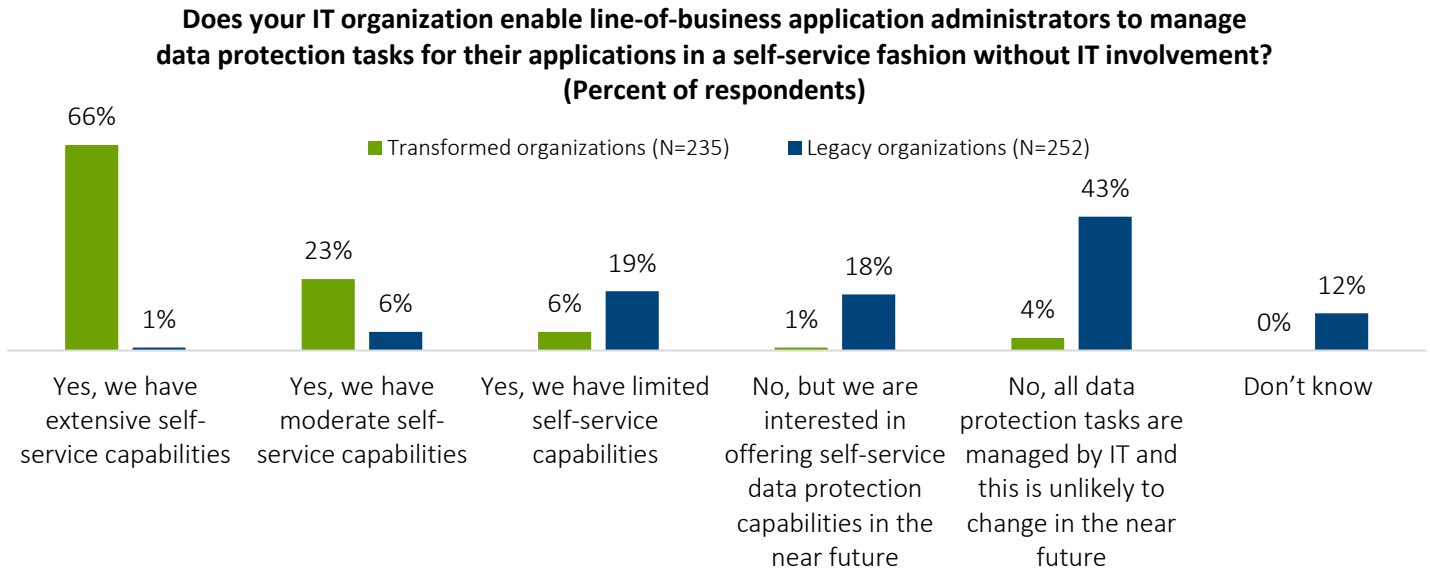
The diversity of the workloads and environments *Transformed* IT organizations must protect is reflected in the array of subsequent technologies deployed for this purpose. In fact, 85% of these organizations have at least three unique data protection mechanisms—covering the spectrum from archive software to continuous availability technology—in place to safeguard assets and data; conversely, more than half of *Legacy* organizations have no more than two data protection technologies implemented.

Providing a Self-service Data Protection Experience

On the heels of trends like bring-your-own-device (BYOD) and cloud computing, employees are increasingly involved with IT. One example of this technology democratization involves self-service capabilities, one of the fundamental tenets of cloud computing, which allows users to provision computing resources unilaterally, including data protection. When asked about whether or not self-service data protection was even an option for users, two-thirds of *Transformed* IT organizations reported extensive availability of these capabilities (see Figure 3).

These respondents are 13 times more likely than *Legacy* organizations to enable line-of-business owners and application administrators to manage data protection tasks like setting backup policies and recovering data as opposed to maintaining strict IT control. Empowering users with these tools has the potential to minimize delays between creation and protection of data and enable faster recovery of data, among other benefits, by reducing or even eliminating the dependence on IT to provision resources or resolve issues.

Figure 3. Transformed Companies Provide Self-service Data Protection Options for Lines-of-business

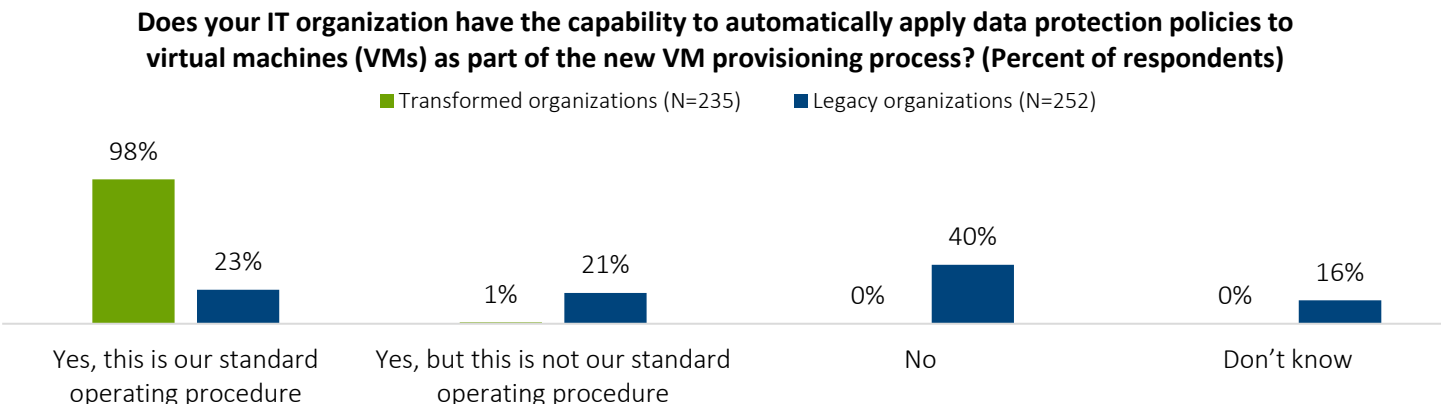


Source: Enterprise Strategy Group

Of course, there are also possible risks in IT conceding certain technology responsibilities, especially those involving data protection, in favor of giving users more autonomy. Generally speaking, automation is increasingly being leveraged by IT departments to minimize lost productivity and lower risk by removing or at least mitigating human error. In the case of users empowered with data protection responsibilities, one way to combat this issue proactively is to ensure that some base level of data protection technology and policy—based on IT experience and guidelines—is automatically applied to virtual machines when they are initially provisioned. By taking this step, organizations could avoid a scenario in which data protection technologies or policies are configured incorrectly, inconsistently, or even not at all by inexperienced practitioners leading to data loss and/or downtime.

Given the inclination of *Transformed* IT organizations to offer their users self-service data protection capabilities, one might expect that they would be much further along the automation adoption curve. Accordingly, nearly 100% of *Transformed* IT organizations automatically apply data protection policies to newly-provisioned virtual machines, and they are four times likelier (98% versus 23%) than their *Legacy* counterparts to leverage automation as the standard operating procedure for data protection purposes (see Figure 4).

Figure 4. Transformed Companies Automate the Application of Data Protection Policies of New VMs



Source: Enterprise Strategy Group

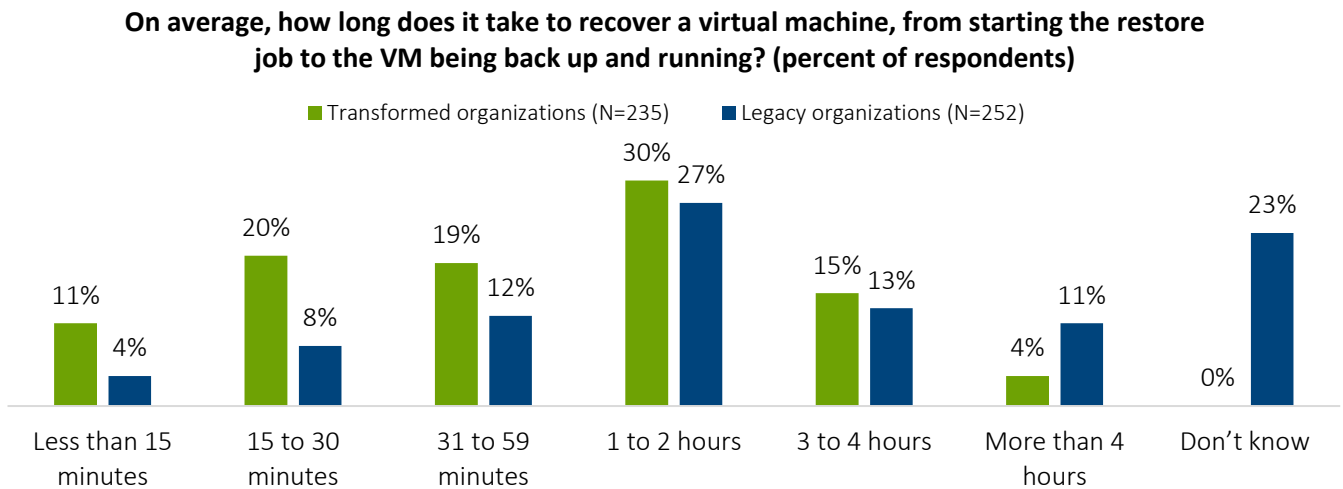
Research Data Validates the IT Transformation Benefits of Modernizing Data Protection

ESG’s research shows that *Transformed* IT organizations are much more likely to take a more comprehensive and modern approach to data protection, but does this translate into measurable technology and business benefits? The answer is a resounding yes. ESG observed distinctly different data protection outcomes depending on the different solution and process decisions related to data protection these organizations make.

Transformed Organizations More Likely to Recover VMs Faster

The time to recover systems and data and restore operations is among the most crucial data protection metrics, and one that has direct and measurable business implications. With this in mind, respondents were asked how long the average virtual machine recovery effort takes, from starting the restore job to having the VM back up and running. As seen in Figure 5, half of *Transformed* IT organizations report that a typical VM restoration effort takes less than one hour, as opposed to only 24% of *Legacy* organizations. Calculating a rough average based on these findings reveals that *Transformed* organizations, on average, recover VMs 31% faster than their *Legacy* counterparts.

Figure 5. Transformed Companies Are Much Likelier to Recover Virtual Machines Within an Hour



Source: Enterprise Strategy Group

Clearly *Transformed* organizations are recovering VMs faster, but does this translate to a higher rate of meeting SLAs? Respondents were asked to provide the approximate percentage of all their recovery efforts successfully completed within predefined targets. Overall, respondent organizations report that 64% of their recoveries meet their preset SLAs, with *Transformed* organizations seeing a higher success rate of 72%.

Following the Strategy of Transformed Organizations Leads to Business Benefits

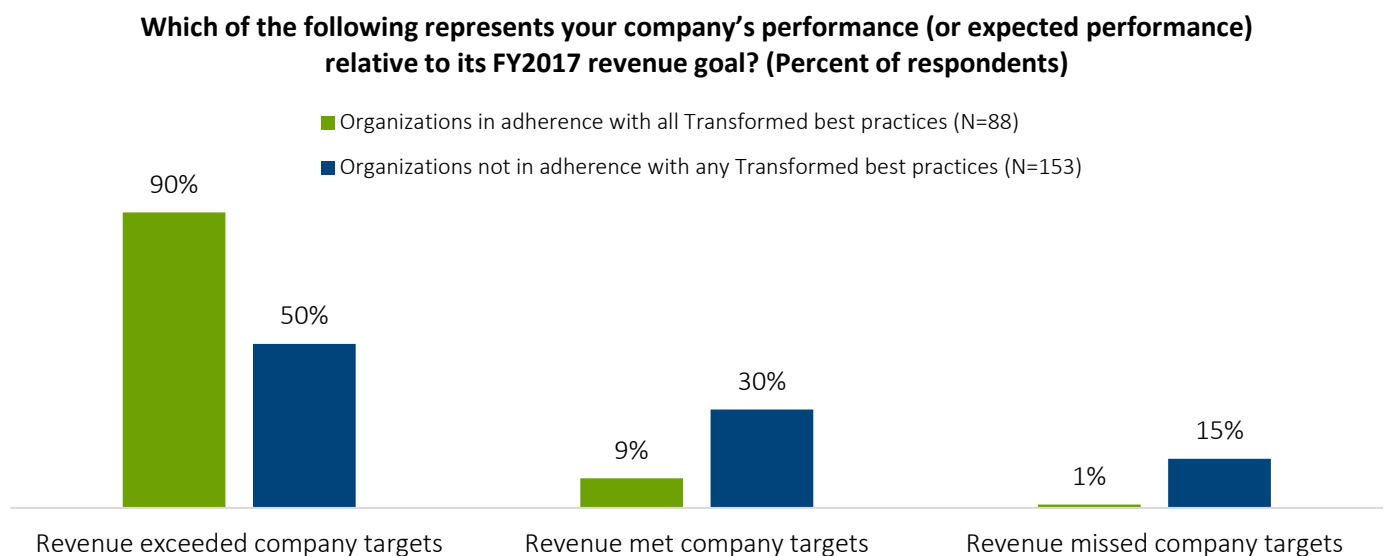
IT organizations are increasingly assessed based on the tangible effects their efforts have on actual business results like revenue. As seen previously, the behaviors of *Transformed* organizations establish a good data protection strategy to follow. Using the number of unique environments protected, the extent of automated data protection policy application, and the existence of self-service capabilities, ESG compared respondents in two groups:

- Organizations adhering to a *Transformed* organization’s data protection strategy:
 1. Protect at least five environments.

2. Automatically apply data protection policy as standard operating procedure.
 3. Offer extensive self-service to users.
- Organizations *not* adhering to any elements of a *Transformed* organization’s data protection strategy:
 1. Protect only one to four environments.
 2. Do *not* automatically apply data protection policy as standard operating procedure.
 3. Offer no self-service option.

According to Figure 6, organizations that have solutions to protect a broad range of environments, enable self-service data protection, and automatically apply protection to VMs are nearly twice as likely to have exceeded revenue goals in 2017 (90% versus 50%). Not surprisingly, organizations that have solutions to protect a broad range of environments, enable self-service data protection, and automatically apply protection to VMs are also eight times more likely to believe they are in a very strong competitive position (56% versus 7%).

Figure 6. Following the Strategy of a *Transformed* Organization Translates to Exceeding Revenue Goals

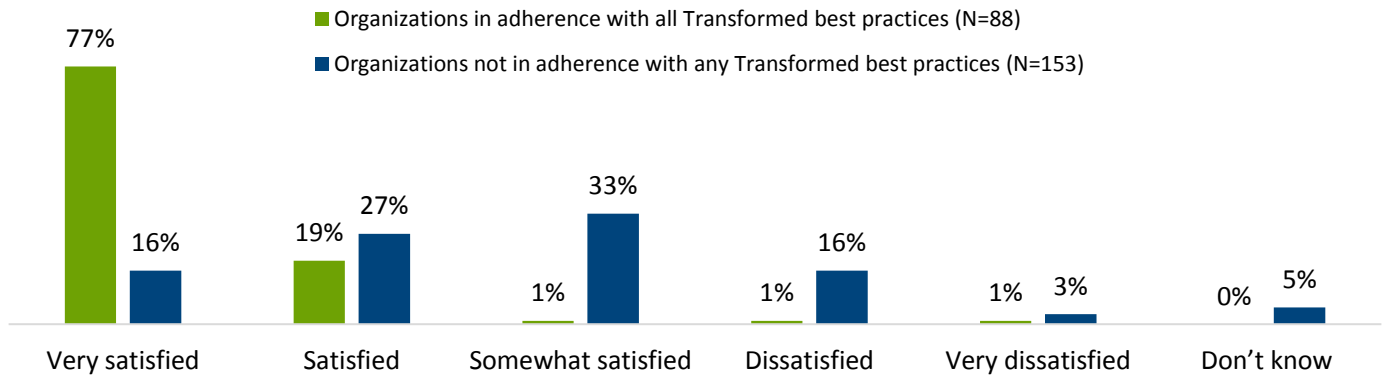


Source: Enterprise Strategy Group

Finally, Figure 7 reveals that executive management at these organizations following *Transformed* best practices are five times likelier to be very satisfied with the data protection outcomes their IT organization delivers (77% versus 16%), likely driven by the fact that these organizations are 14% more likely to hit their recovery targets.

Figure 7. Following the Strategy of a Transformed Organization Leads to Satisfied Executive Management

How would you rate the satisfaction of your company’s executive management team with the data protection outcomes (recoverability, speed, agility, etc.) your IT organization is currently able to deliver? (percent of respondents)



Source: Enterprise Strategy Group

The Bigger Truth

ESG has long held the position that when modernizing a production IT environment, it is essential to modernize the protection environment as well. Deploying data protection solutions that can meet the needs of many different workloads and the associated business objectives is critical. Choosing the right solution, given characteristics like data growth, data mobility, service level requirements, and consumption model (on-premises, virtualized, hybrid cloud, and cloud-native), is central to both IT Transformation and improving data protection outcomes. Organizations under pressure to recover faster, within predefined service levels, and also facing pressure from executive management to be more efficient should consider a granular protection strategy that enables both automation and business-user self-service within IT guidelines.

ESG’s research bears out that organizations putting in the effort to transform their data protection practices—which includes empowering line-of-business and application owners to protect their own assets—are more agile, more profitable, more cost-efficient, and in general, are running more effectively. Furthermore, organizations bolstering transformation efforts at both a general IT and data protection-specific level can thrive in a digital world and stay ahead of their competitors.

Given those compelling benefits, what are you waiting for? Read the full global study and begin your IT Transformation maturity assessment.

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