

The Trusted Data Center and Purpose-Built Data Protection Appliances: Best Practices and Business Results for Mid-Market Organizations

Insights from Dell Technologies & Intel Corporation's
Global Survey of Mid-Market IT Leaders

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DELLTechnologies





When Security Is At The Core, Everything Else Falls Into Place: The Trusted Data Center Maturity Model

Many mid-market organizations struggle to deliver the data center security and reliability demanded in this highly competitive segment of the market. Both line-of-business and IT stakeholders acknowledge room to improve:



38%

of line-of-business executives have serious concerns about IT's security capabilities and controls. **This is the most frequently cited issue line-of-business respondents have with IT.**



46%

of IT practitioners feel they have a problematic cybersecurity skills shortage. **This is the skills shortfall most frequently cited by IT respondents.**

Why Does Leading in Data Center Trust Matter?

By prioritizing the security and dependability of their IT environments above all else, mid-market organizations with trusted data centers experience very real and quantifiable business and technology outcomes that give them the edge and agility to win in today's highly competitive marketplace.

Data center risk has the potential to hurt organizations relative to competitors:

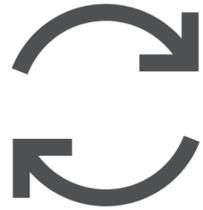
- Outages can disrupt customer service, leading to customer churn or negative reviews.
- Downtime also has direct financial implications. ESG's research shows the average hourly cost of downtime for **surveyed firms is between \$30,000 (median) and \$38,000 (mean).**
- Compliance violations often have direct financial consequences. For example, a GDPR violation could **result in a fine of up to 4% of an organization's annual revenue.**

This eBook is grounded in peer-based primary market research and is intended to highlight the behaviors and performance of organizations leading the market in data center trust **specifically as it relates to their use of purpose-built data protection appliances (PBDPAs):** standalone storage devices optimized for storing backup data. PBDPAs run their own, backup-related workloads without impacting other servers. Because they are separate devices dedicated only to those workloads, they do not take resources away from devices handling active storage or applications.

What It Means to Be a Trusted Data Center Leader

Dell Technologies, Intel Corporation, and ESG recently completed a survey of 1,650 IT executives and strategists at organizations with less than 1,000 employees. The research showed that just **7% of mid-market organizations could be categorized as trusted data center Leaders** that were in alignment with a broad set of best practices spanning different aspects of infrastructure, security, and data protection. On the other end of the spectrum, **33% of mid-market organizations were categorized as trusted data center Laggards**, in alignment with half or less of the best practices assessed.

Trusted Data Center Best Practices:



Refresh/retire data center infrastructure regularly

- Average server age is <3 years at all Leader organizations
- Average storage system age is <3 years at all Leader organizations



Believe strongly that trusted technologies matter

- All Leader organizations believe it is important to encrypt sensitive data
- All Leader organizations believe “built in” secure infrastructure is important



Act on beliefs by using trusted technologies

- All Leader organizations actually encrypt sensitive data
- All Leader organizations replicate most/all sensitive data to secondary systems

Download the full report for more information

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PBDPAs in Production: Improve Business Continuity and Increase Agility

By utilizing PBDPAs, organizations are able to add another layer of protection around mission-critical applications and data. With PBDPAs in production, organizations are able to meet recovery SLAs 63% of the time, a statistically significant improvement over organizations not using PBDPAs. This improvement bolsters organizational confidence in data recoverability and puts organizations in a stronger competitive position.

Confidence In Data Recovery Capabilities

Organizations need peace of mind that they can recover their data and resume business functions as soon as possible.



CONFIDENCE TO RECOVER DATA

In a major data security event, organizations need to be able to recover data from a trusted copy with negligible data loss. **Organizations with PBDPAs in production are 1.8X more confident** in their ability to recover data with negligible data loss than those not using PBDPAs.

Shift Focus Towards Product Development

Keeping data safe and recoverable helps organizations maximize productivity, which correlates to increased innovation and accelerated time-to-market.



TIMELINESS DEVELOPING AND LAUNCHING PRODUCTS

86% of organizations with PBDPAs in production are successfully staying ahead of their competitors when it comes to developing and launching new products. Moreover, PBDPA users are **2.9X more likely** than non-PBDPA users to be significantly ahead of their competitors.

PBDPAs In Production: Increase Market Share, Drive Top-Line Revenue Growth

Focus on Revenue Expansion

With improved abilities to back up and recover data, organizations using PBDPAs can focus IT resources in areas that directly improve business competitiveness, grow revenue, and expand their market share. This is especially apparent when comparing the business results of organizations who consistently leverage PBDPAs against those who do not.

INCREASE MARKET SHARE

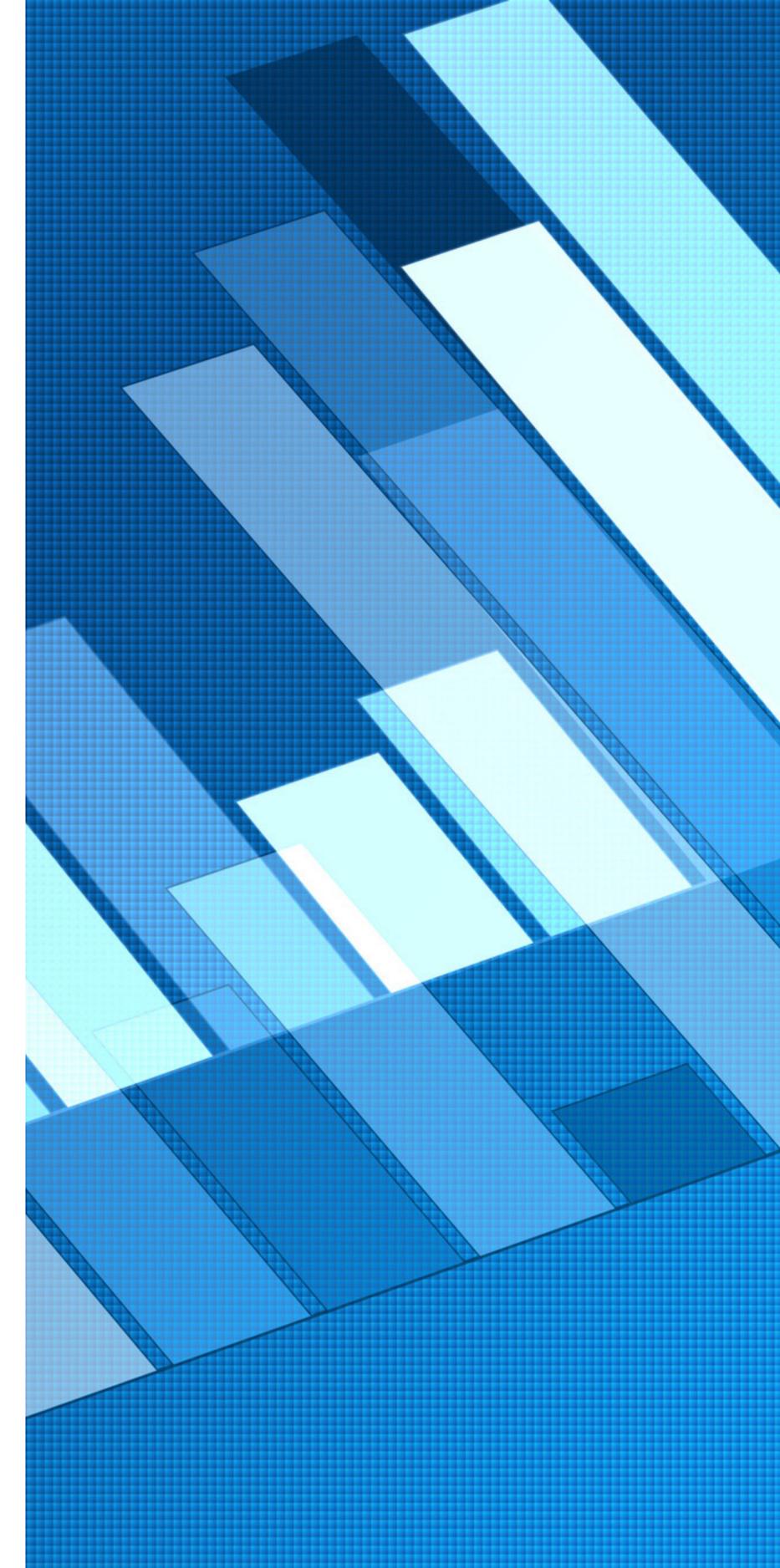


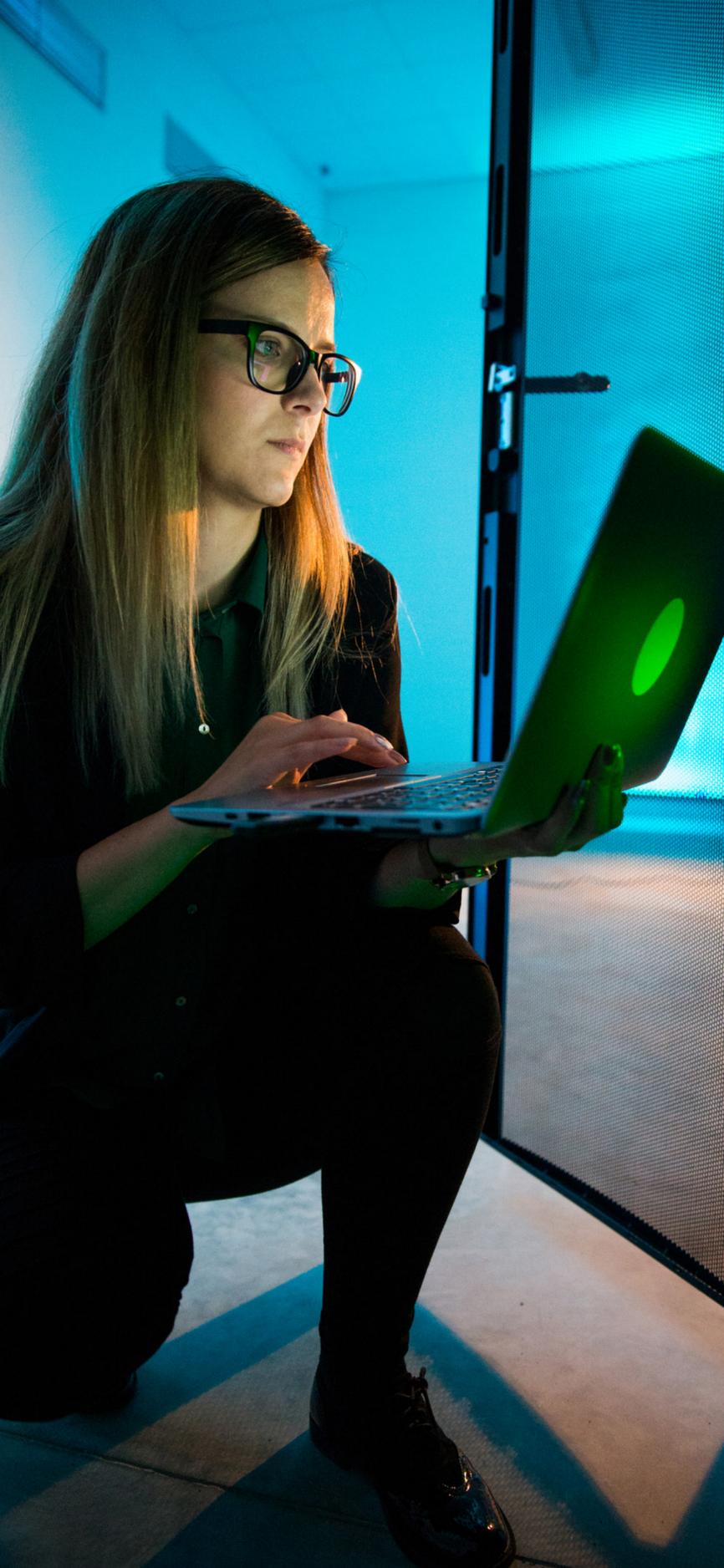
Organizations using PBDPAs currently were more likely to increase their market share over the past 12 months. Moreover, **95% of PBDPA users were able to either maintain or increase their market share in the past years.**

INCREASE REVENUE



Current PBDPA users are also more likely to grow their revenue over the next several years compared to non-PBDPA users. On average, PBDPA organizations expect to **grow revenue 1.9X faster than non-PBDPA users (by 21% per year versus by 11% among non-users).**





How PBDPAs Factor into Greater Performance for Leaders: Fewer Outages, Improved SLA Adherence

Leaders capitalize on their investment in purpose-built data protection technologies and their use of specialized protection technologies, such as flash acceleration and deduplication. As a result, **Leaders are confident in their ability to recover data in case of an unplanned outage.**

High confidence in system uptime and data recoverability

Compared to Laggards, Leaders are...

- » **2.7X** more likely to view their application and system uptime as excellent.
- » **2.5X** more likely to be very confident in their ability to recover data to resume business operations from an unplanned outage within one day.
- » **2.6X** more likely to be very confident in their ability to recover from a major data security event with negligible data loss.

Service Level Agreement for Data Recovery

Due to their investments in modernized infrastructure, Leaders are able to reduce their SLA-based data recovery time. Leaders are **4X more likely than Laggards to have an SLA-based recovery time of less than 2 hours. On average, Leaders aim for a 39% smaller recovery time window than Laggards.** More importantly, **Leaders are able to adhere to their SLAs 25% more often than Laggards,** despite the fact that their SLAs are more aggressive.

SLA DYNAMICS

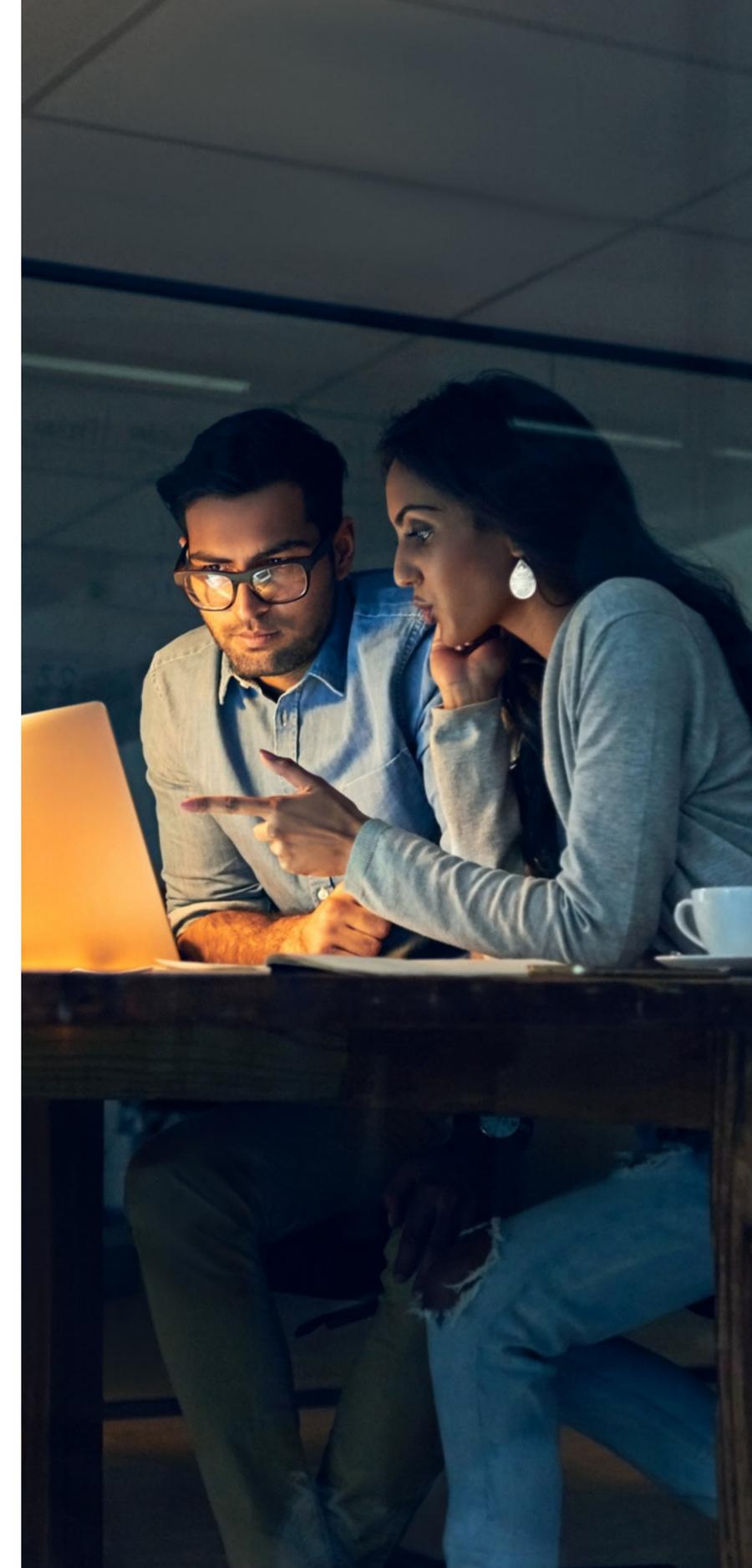
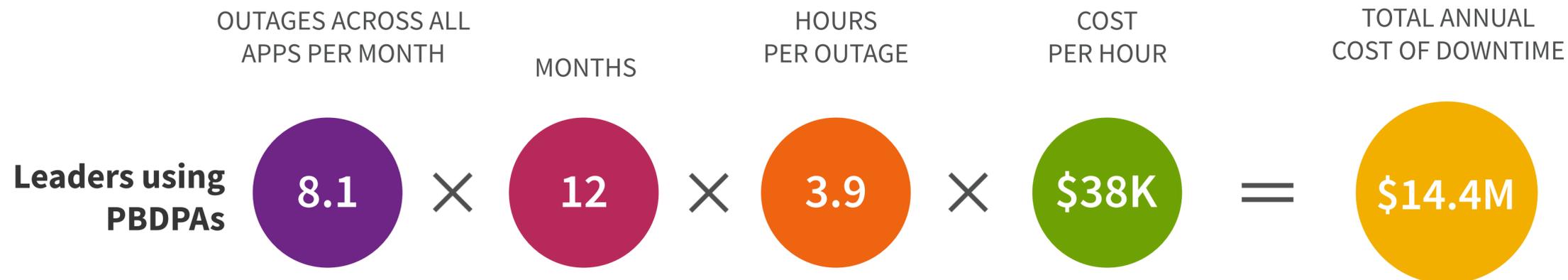
SLA for data recovery from when recovery request is submitted (on average)	Leaders: 5.7 hours	Laggards: 9.4 hours
SLA adherence (on average)	Leaders: 71%	Laggards: 57%

Quantifying the Value of PBDPA Deployment

Due, in part, to the better recoverability enabled by the technology, Leaders that leverage PBDPAs experience fewer application outages that are resolved faster. Combining this data with the average cost of downtime reported, **Leaders using PBDPAs save as much as \$19.6M/year in avoided downtime compared to Laggards that do not use PBDPAs.**



**58% reduction
in downtime cost**





How to Become a Leader: Deploy Purpose-Built Data Protection Appliances (PBDPAs)

Leaders are more likely to utilize PBDPAs in their data centers, which enable them to continuously back up their mission-critical applications.

PBDPAs are standalone storage devices that are optimized for storing backup data. As turnkey appliances dedicated solely to data protection and disaster recovery, PBDPAs can improve an organization's ability to restore data for business continuity.

PBDPA DEPLOYMENT TRENDS



Leaders are 2.3X more likely than Laggards to have PBDPAs currently in production.

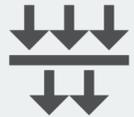
FREQUENCY OF MISSION-CRITICAL APPLICATION DATA BACKUP



The frequency with which organizations back up their critical data directly impacts their data loss risk exposure. **Leaders are 4X more likely than Laggards to continuously back up their mission-critical application data.**

Characteristics of a Leader: Increased Adoption of Advanced Data Protection Technologies

Leaders are fail-safe from outage loss by utilizing more varied and advanced data protection technologies compared to Laggards. More specifically, Leaders are more likely to adopt the following data protection technologies compared to Laggards.

-  **BACKUP TO DISK WITH FLASH/SSD ACCELERATION**
53% more likely than Laggards
-  **DEDUPLICATION**
12% more likely than Laggards
-  **REPLICATIONS**
23% more likely than Laggards
-  **ARCHIVING CAPABILITIES**
18% more likely than Laggards





Proving the Value of Becoming a Leader: The ROI of Risk Reduction

Investments in infrastructure technologies, like PBDPAs, are made in part to help organizations maximize uptime and availability and minimize security risk. But do Leaders, who make bigger bets on trusted technologies, get more bang for their buck?



92% of Leaders report that investments in infrastructure technologies to maximize uptime and availability and minimize security risk have **met or exceeded ROI forecasts.**



Leaders were also 1.6X more likely than Laggards to report ROI for these investments **has exceeded forecasts.**



Leaders are 2.2X more likely than Laggards to feel their investments in infrastructure technologies to maximize uptime and availability and minimize security risk **have greatly reduced organizational risk.**

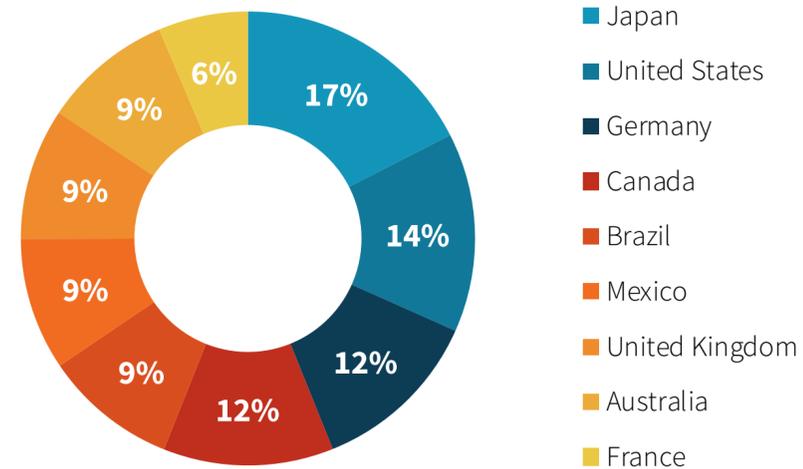
Methodology and Demographics

Data in this eBook comes from a comprehensive online survey of IT decision makers. The survey was fielded between June 13, 2019 and July 8, 2019. To qualify for this survey, respondents were required to be involved in the decision-making process for data center technology purchases at their organization. Moreover, they must have reported a high degree of familiarity with their organization's risk reduction strategies and priorities. Finally, the research was exclusive to the mid-market: All respondents must have been employed at organizations with between 100 and 999 total employees.

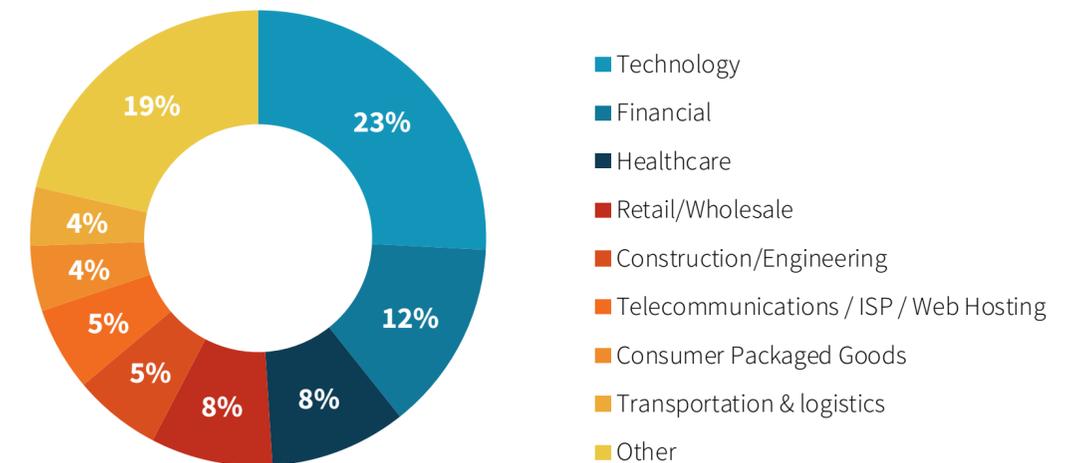
After filtering out unqualified respondents, removing duplicate responses, and screening the remaining completed responses (on several criteria) for data integrity, a final sample of 1,650 respondents remained.

These figures detail the firmographics of the respondent base, including respondents' country of residence, respondents' responsibility level, organizations' total number of employees, and organization industry.

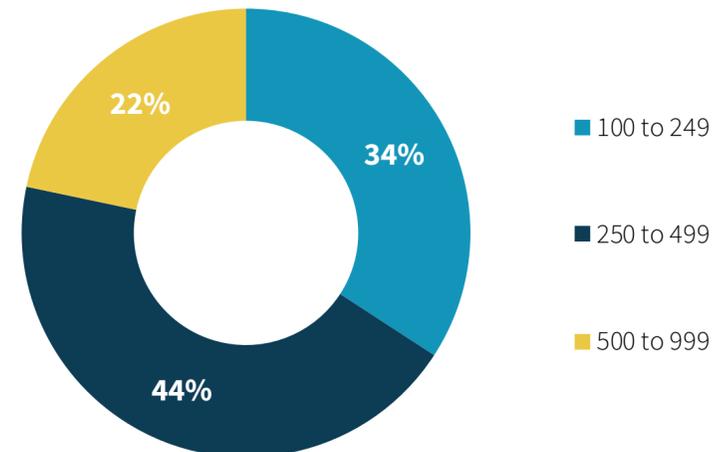
Respondents by Country



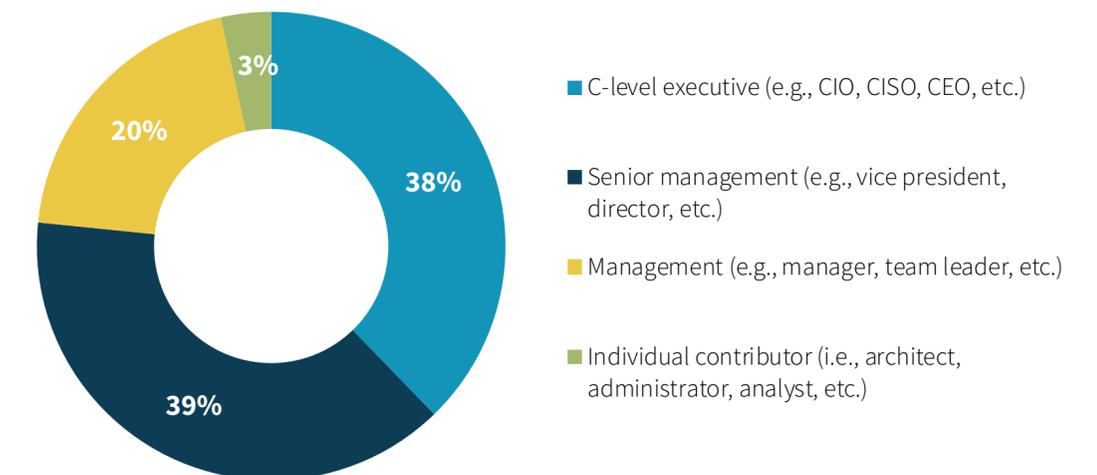
Respondents by Industry



Respondents by Company Size (Number of employees)



Respondents by Job Title/Level



About Dell Technologies:

With the broadest portfolio of trusted infrastructure and data protection solutions, Dell EMC Technologies provides real expertise for end-to-end security, enabling mid-market businesses to adopt transformative technologies to maximize performance, compete, and grow.

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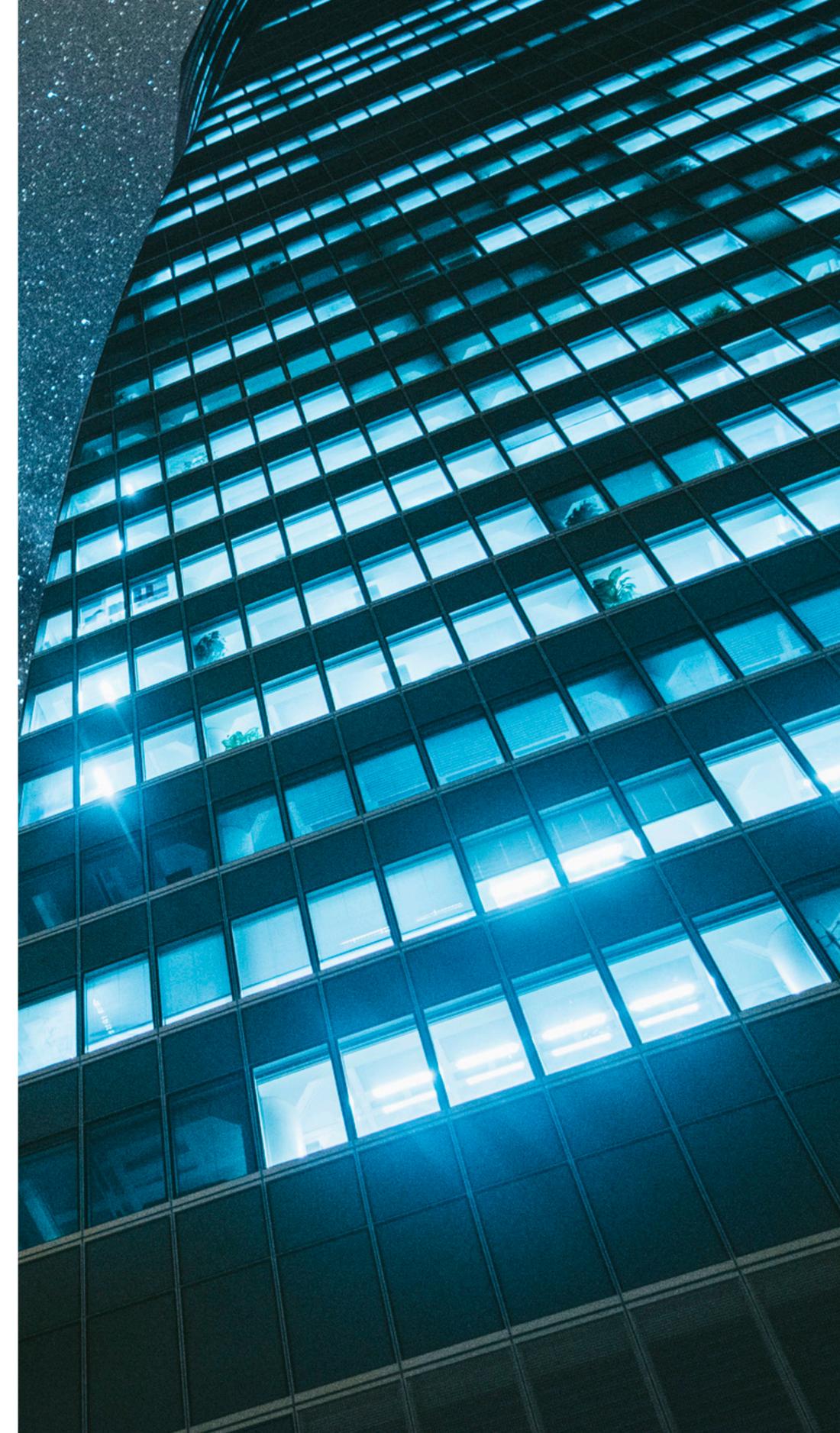
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About Intel®:

Today's organizations face strategic challenges as they modernize data centers and servers. Intel® is driving platform innovation and next-generation capabilities across every infrastructure domain—from compute to storage to network to memory to accelerator technologies. With Intel® architecture-based platforms, you have a clear path forward for the data-centric era.

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