



The IT Leader's Guide to  
**Delivering a Winning  
Multi-Cloud Strategy**

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# Executive Summary

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Digital Transformation is no longer a buzz word, but rather a direct reflection of the massive technology changes happening today. Every organization in every industry is taking big strides to apply technology to their business.

Take the retail sector for example, where digital disruptors have put incumbents under substantial pressure to compete. The incumbents knew retail better than anyone, but as sales moved online, they needed to combine technology with their industry knowledge to maintain their edge. Those that did this started making data-driven decisions and delivering new customer value. Those that didn't saw their competitive advantage vanish and are now facing eroding margins and lost revenue.

Increasingly, organizations have adopted a cloud-first mindset to support this transformation, but without consideration for business and application requirements, they could be introducing many challenges. Cloud will absolutely be a requirement for success going forward, but finding the right mix of multiple public and private clouds is increasingly the most important decision that faces technology leaders. Operating multiple clouds with disparate infrastructure and operations brings with it operational silos, complex workload migrations, the need for new skills and processes, uncertain security processes and inconsistent SLAs. To overcome this complexity, the ideal choice for organizations is to embrace a consistent hybrid cloud experience where possible. This maximizes the benefits for their workloads across both public and private clouds.

This eBook will provide guidance on what it takes to deliver success across seven key facets of your technology landscape. Armed with this knowledge, you can build a winning hybrid cloud strategy spanning multiple environments that accelerates innovation, meets the massive growth of data, and reduces cost of delivering IT services across the business.



# 1. Infrastructure Strategy

## Multi-cloud complexity

### Siloed IT environments reduce productivity

Even after migrating some workloads to the public cloud, most organizations will continue to leverage a substantial data center footprint. In doing so, they create operational silos where physical and cloud assets are out of sync and cannot move across IT environments. In this siloed model, you're unable to bring the cloud's value to all of your workloads and continue to experience poor agility and flexibility on-premises.

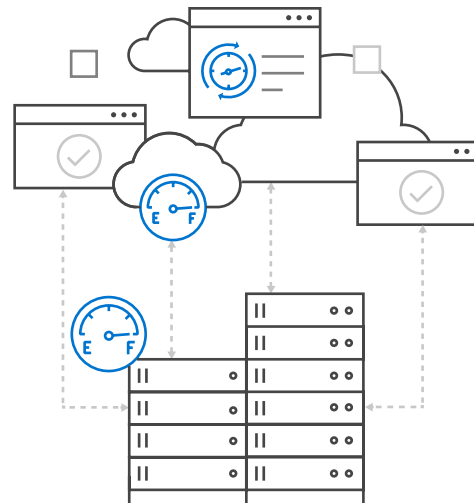


When on-premises and public cloud workloads are siloed, IT is hindered.

## Consistent hybrid experience

### A common operational framework increases IT efficiency

Adopting a consistent hybrid cloud strategy allows you to deliver the performance and service levels that your users expect while maximizing the value you get out of existing IT investments. This helps you take advantage of the cloud's agility and flexibility, while maintaining the security and control you're accustomed to on-premises.



A consistent hybrid approach means you get the best of both on-premises and public cloud.



## How Dell Technologies Cloud helps

Dell Technologies Cloud leverages VMware Cloud Foundation and integration with public platforms to create a consistent hybrid cloud experience. Compute, storage, and network are all virtualized and consumed as a service.

Because you have a consistent experience, you can easily onboard new cloud assets while keeping data and workloads portable. Automated lifecycle management simplifies ongoing operations.

## 2. IT Management

### Multi-cloud complexity

#### Complex IT environments with legacy infrastructure are wasteful and slow innovation

Organizations often feel tied to their legacy infrastructure, as critical applications depend on it. However, this legacy infrastructure often prohibits them from realizing their digital transformation initiatives. Currently, the average IT organization spends 75% of their time just keeping their infrastructure up and running, which means only 25% is spent on innovation that can drive new value.

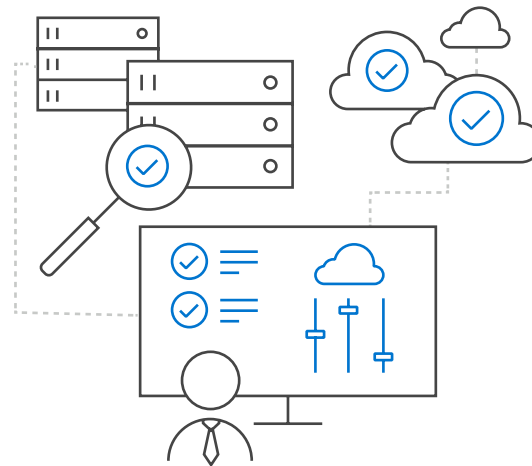


Disparate management experiences take time away from high-value activities.

### Consistent hybrid experience

#### Simplified IT management lets you focus on what matters

Implement a consistent hybrid-cloud strategy that delivers common management capabilities across separate clouds and on-premises data centers. This bridges silos and gives you a common set of tools and processes, eliminating complexity that hinders IT operations. The result is a shorter learning curve for new team members and accelerated time-to-value.



With a unified management experience, IT departments are able to devote more time to activities that drive business value.

### Shorter time to market

# 15%

median reduction in time to market as a result of hybrid cloud investments\*



### How Dell Technologies Cloud Helps

With consistent infrastructure and operations across private clouds, public clouds, and edge locations, organizations can streamline operations, simplify management, and lower TCO across multiple clouds.

\* IDC White Paper, May 2019. The Power of the Hybrid Cloud Strategy: Addressing the Breadth of Enterprise Workload Requirements.

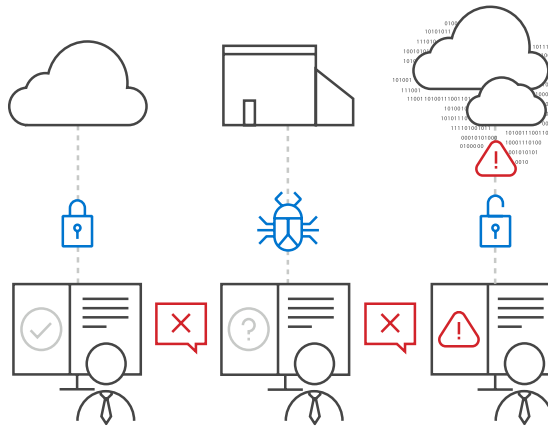
# 3. Security and Risk

## Multi-cloud complexity

### Separate security frameworks create risk

Public cloud providers use shared responsibility models for security, where they share the burden of security with the customer. This means the customer still has to do quite a lot of work to ensure their data and workloads are secure, especially when their existing security policies cannot be ported to public clouds.

Running in multiple clouds requires an organization to understand and operate in separate shared responsibility models that can be substantially different. This creates confusion that often leads to gaps in their security posture.

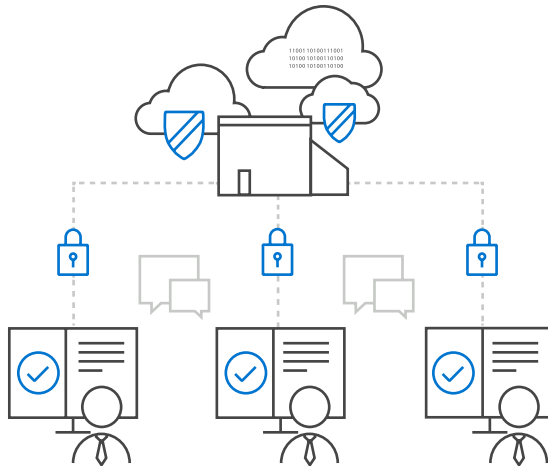


Operating with several different security frameworks weakens your security posture.

## Consistent hybrid experience

### Enforce consistent security practices everywhere

To overcome this challenge, you need the ability to enforce security policies consistently across cloud providers and minimize your attack surface. With the proper visibility and control over applications and data, you can eliminate blind spots, ensure protection, and comply with regulatory requirements—enhancing your overall posture.



A security framework that spans your multi-cloud environment gives you consistent protection.

## Risk reduction

# 13%

average reduction in risk by investing in a hybrid cloud architecture\*



## How Dell Technologies Cloud helps

Dell Technologies Cloud can help you minimize risk and implement consistent hybrid protection. With VMware NSX, networking and security policies can be enforced across every cloud and you can deploy workloads to the environment that best fits your operational models and risk profiles. Micro-segmentation capabilities provide granular traffic control and minimize your attack surface. Together, these capabilities allow you to meet security and compliance requirements and expand into new geographic regions quickly, while maintaining data sovereignty.

\* IDC White Paper, May 2019. The Power of the Hybrid Cloud Strategy: Addressing the Breadth of Enterprise Workload Requirements.

# 4. Developer Experience

## Multi-cloud complexity

### Developer silos impact productivity

Having separate approaches to developing on-premises and in public cloud leaves those on-premises not getting the resources they need when they need them. Those in the cloud receive an agile experience, but cross-training their peers building on-premises is time-consuming and expensive. Further, skilled developers want to work in modern, containerized environments, making it hard for organizations who don't have a strong cloud strategy to attract top talent. When organizations do try to move to the cloud, they often task developers with the security and management of their cloud environment, leading to obvious gaps in cloud security.



The experience for developers in a single organization can vary dramatically.

## Consistent hybrid experience

### Increase productivity with a consistent toolset

Give developers the agility they need by providing the choice to work with the development model they're comfortable with. Cloud has traditionally burdened developers by giving them new responsibilities, such as security and operations, which impacts their ability to focus on building applications. By automating routine tasks, you can free up your developers to focus on application development.



When developers get a great experience whether on-premises or in the cloud, they are empowered to build better applications.



## How Dell Technologies Cloud helps

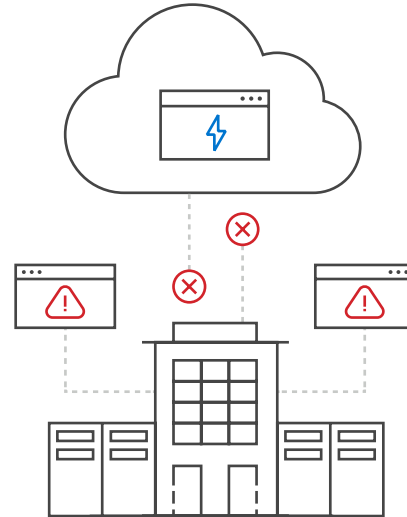
Dell Technologies Cloud delivers consistency and choice, so developers can focus on delivering innovation, with support for traditional applications as well as Kubernetes container orchestration. Familiar VMware environments enable automation using software-defined infrastructure and advanced management. A consistent toolset gives developers a great experience regardless of whether they're running on-premises or in a public cloud.

# 5. Business Continuity

## Multi-cloud complexity

### Downtime has costly consequences

Inconsistent SLAs across clouds often create confusion and difficulty understanding the root cause of failures. Unplanned outages or service level limitations induced by any single provider can be detrimental to your business, increasing the risk of data loss and leading to a substantial hit in revenue. Many organizations also have the misconception that running their data across multiple geographic regions automatically protects them from data loss. However, this is not always the case and thus, these customers lack adequate protection across their public clouds.



The lack of a robust backup and data protection solution can significantly impact an organization's bottom line.

## Consistent hybrid experience

### Maintain resource availability

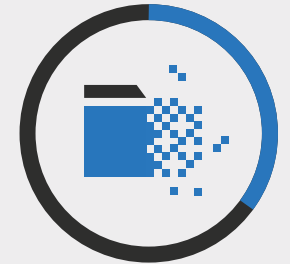
In order to ensure business continuity, you need a solution that provides data protection, the ability to set protection policies across heterogeneous IT environments, and allows you to failover to available cloud providers when an outage occurs. This functionality can effectively remove downtime and maintain the level of service your users expect.



Data management across clouds and the ability to quickly and reliably failover to cloud environments protects organizations from costly downtime and data loss.

## The cost of data loss

**28%** have experienced data loss in the last twelve months



with an average cost of

**\$996,000\***

## How Dell Technologies Cloud helps

With Dell Technologies Cloud, you can create common operating models and extensible management, security, and disaster recovery policies across all your clouds. Seamlessly shift workloads between clouds for greater availability and deliver scalable and resilient infrastructure on-premises. Strong data protection capabilities help you ensure availability and protection of your most valuable asset-- your data.

\* Vanson Bourne Dell EMC sponsored research on Global Data Protection Index, November 2018.

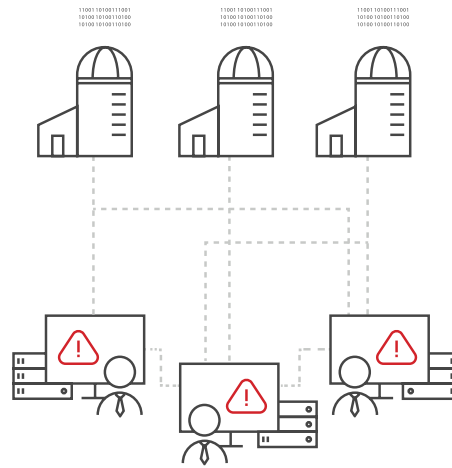


# 6. Data Platform and Analytics

## Multi-cloud complexity

### Limited use of data for insights

Cloud sprawl leads to data silos which prevent team members from accessing the insights they need. In many cases, storing data in public cloud also translates to a loss of data control. Further, as more data moves to the cloud, applications tend to follow it, a phenomenon known as data gravity. This can lead to poor application performance.



Data silos significantly impact an organization's ability to derive insights.



## Consistent hybrid experience

### Create value with full access to data

To realize the full potential of your data, you must leverage a platform that allows you to remain flexible by making data accessible and allowing you to control where it lives. Keeping data local helps reduce the chance that distance-based latency that can occur with cloud analytics prohibitively impacts performance. Additionally, by moving analytics to the edge --where data is captured-- you can limit costs, accelerate time to insight, and improve



By unifying data across your environments you can harness its power to drive applications and derive insights.

operational efficiency.

### How Dell Technologies Cloud helps

Dell Technologies Cloud simplifies your data landscape with a consistent cloud experience that allows application and business requirements to dictate where workloads reside. This means you can power applications and maintain control of your data across all environments. Dell Technologies Cloud also provides Data Center-as-a-Service for edge locations on which you can run analytics.

# 7. Total Cost of Ownership

## Multi-cloud complexity

### Public cloud is not always cheaper

Organizations that chase a cloud first mandate vs. analyzing business and application requirements often end up with costly operations when a workload that is a poor fit for cloud is forced into the wrong environment. In other cases, customers are stuck in aging data centers where they are unable to adopt an OpEx-based cost model, and can't move to public cloud due to the costs of migration.



Operating separate models for both locations without the ability to optimize costs across both leads to waste.

## Consistent hybrid experience

### Deliver cost predictability and lower TCO

To overcome these challenges, you need a consistent hybrid cloud experience that allows you to align workloads with the pricing models that make the most sense for your business while alleviating management overhead. Further, you want to be able to scale on-demand and avoid over-provisioning while leveraging OpEx pricing in your data center.



By driving consistency across cloud locations, the right economic model can be attained for each workload, greatly reducing TCO.

## Lower total cost of ownership

# 47%

lower TCO over a 5-year period

with  
**consistent  
hybrid cloud\***



## How Dell Technologies Cloud helps

Dell Technologies Cloud reduces TCO by enabling you to adopt elastic consumption models, including OpEx pricing in your data center. Consistent management across environments simplifies operations, allowing your team to spend 25% of the time keeping the lights on, and 75% of their time on innovation. By providing consistent virtualized infrastructure, Dell Technologies cloud cuts the cost and accelerates the timeline of cloud migrations.

\* IDC White Paper, April 2019. Benefits of the Consistent Hybrid Cloud: A Total Cost of Ownership Analysis of the Dell Technologies Cloud.



**DELL**Technologies

## Dell Technologies can help you define a winning cloud strategy.

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A great cloud strategy helps your organization deliver operational efficiencies, provide great customer experiences, and address business needs in real time. It also needs to account for where your organization is at, to make the process frictionless and minimize business disruption.

With Dell Technologies Cloud, you can eliminate the complexities of operating in multiple clouds with a consistent hybrid cloud solution that streamlines operations, simplifies management, and lowers TCO across all environments. Combining the power of VMware Cloud Foundation and Dell EMC, Dell Technologies Cloud lets your business needs determine where workloads should reside. With cloud consumption models and best-in-class infrastructure, Dell Technologies gives you the flexibility and reliability you need.

**[Contact us to get started today](#)**



Dell Technologies Cloud is a set of cloud infrastructure solutions built on Intel® architectures and are supported by the industry's broadest ecosystem. This provides trusted cloud computing and enhanced security, along with workload-optimized and scalable performance across public clouds, private clouds, and edge locations.