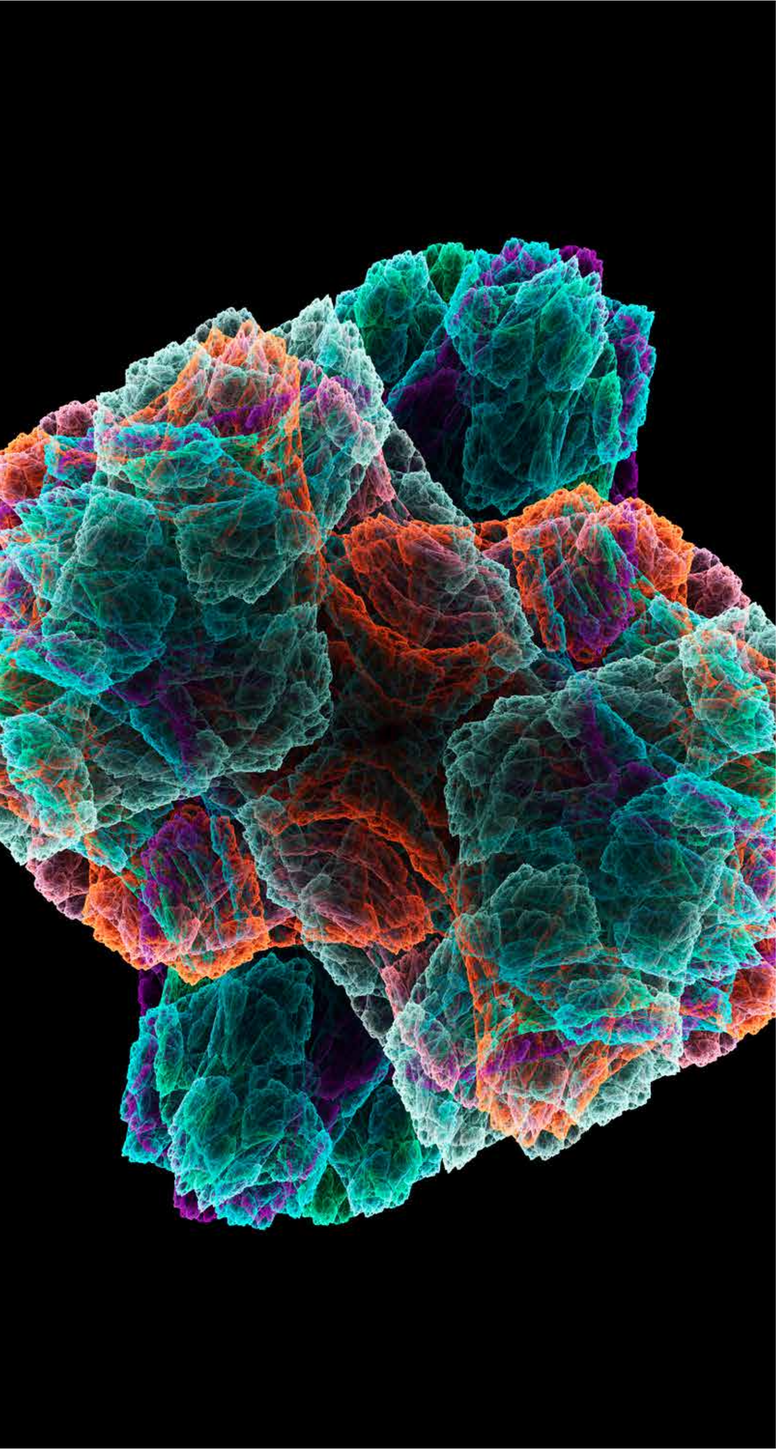
eBook

# UNLOCK DATA'S POTENTIAL WITH INTELLIGENT STORAGE

CSPi
Technology Solutions



# Extracting value from data across hybrid cloud environments is the next frontier.

Extracting value from data is central to the digital transformation required for businesses to succeed in the decades to come. Buried in data are insights that reveals what your customers need and how they want to receive it, how sales, manufacturing, distribution, and other aspects of business operations are functioning, what risks are arising to threaten the business, and more. That insight empowers your businesses to reach new customers, develop and deliver new products, to operate more efficiently and more effectively, and even to develop new business models.

**Maximizing the transformational value of digital information requires data to be leveraged at both the optimal time and the optimal place. This new requirement poses a challenge—since data has "weight," it is costly and time consuming to move across locations.**

– Enterprise Strategy Group, October 2018

In today's digital era, new applications and workloads are creating data across a hybrid IT landscape, with huge amounts being generated at the edge, in the cloud, and in the datacenter.  Data holds the power to transform—but only if it can be refined and accessed when and where it's needed, anywhere across a hybrid cloud environment. Most enterprises see hybrid clouds—their ecosystem of workloads deployed across public clouds, private clouds and on-premises—as the new reality.

However, with hybrid cloud, there is still work to be done to match the agility and consumption experience of the public cloud. Harnessing the transformative power of data in the hybrid cloud computing environments of the future is the next frontier for IT—and for business.

**THE BUSINESS IMPACT:**
IT staff can help transform the business by harnessing the power of data exactly when it's needed; no matter where it lives.

# OVERCOME THE LIMITATIONS OF TODAY'S STORAGE

Innovation has fostered the emergence of new technologies like predictive analytics and artificial intelligence designed to find the insight in exploding volumes of data. But data storage hasn't kept up. Existing storage systems were designed in a different era to do a different job in a different environment.

# Limitation #1: It's still too complex

Traditional storage, and even flash storage, are not designed to handle the complexity of our edge-enabled and cloud-connected world. The challenge with these approaches is that they conceal or overlook your data's value, force you into outdated support and ownership models, and slow your ability to respond to business needs. As a result, much of storage administration is spent on:

- Reactive and time-consuming trouble-shooting of performance issues and outages
- Determining optimal workload placement across a hybrid IT estate
- Navigating infrastructure complexity that hinders data mobility between edge, on-premises, and public cloud
- Keeping up with the volume and pace of data being created
- Having too much data to process, store and copy, coupled with uncertainty about what to discard, without compromising security and compliance regulations for different data types.

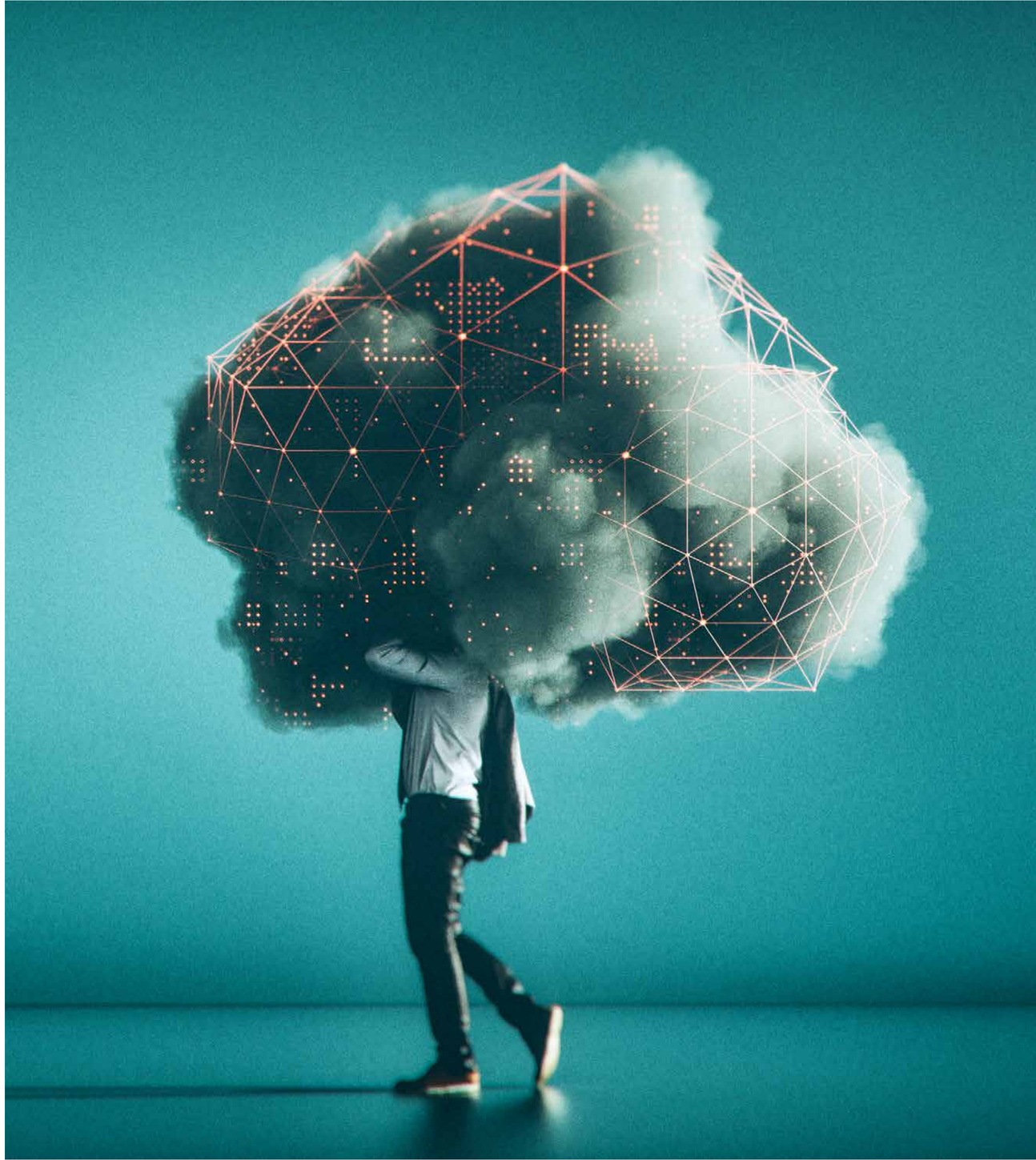
**An ongoing shortage of IT skills and resources makes the problem acute.**

**THE BUSINESS IMPACT:**
Complexity slows your business down. It forces IT to spend most of their time reacting and troubleshooting performance issues and outages.

# Limitation #2: It turns clouds into silos

Mobility, social media, and the Internet of things have given rise to a new generation of applications. But these emerging applications didn't necessarily emerge in the data center. Cloud-based apps gather and store data in the cloud. And data is increasingly collected and applied in remote edge locations such as factories, transportation hubs, oil fields, and ships. Data spills across the entire hybrid cloud landscape in disjointed data silos rather than an integrated, continuous computing environment that lets IT run each app in the best place.

**THE BUSINESS IMPACT:**
Administrators must manually keep track of where data lives and where it's actually used, and then spend time moving it from the edge to the cloud to the data center and back.

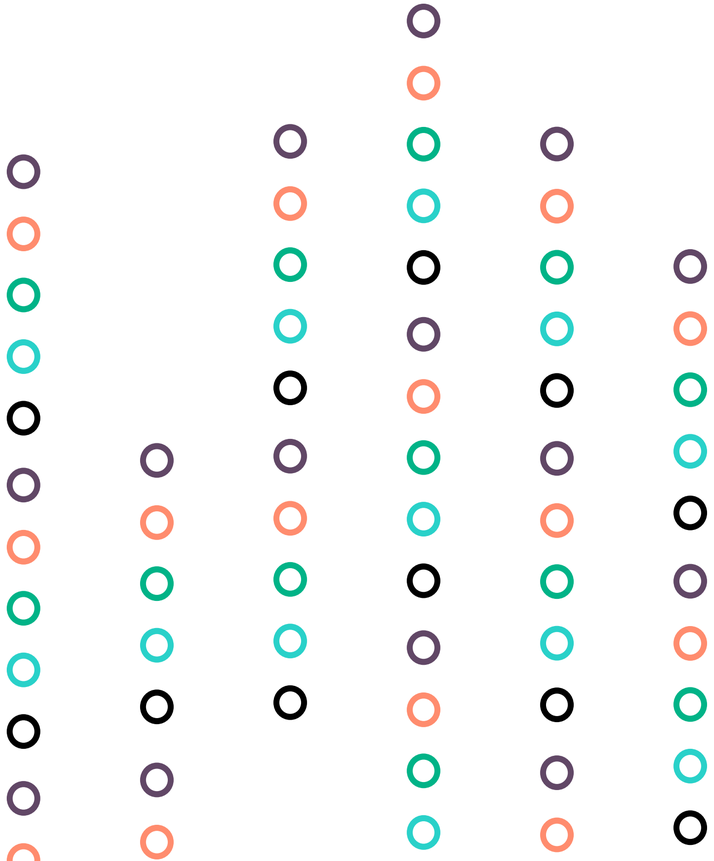


# Limitation #3: Its cost doesn't match its business value

Storage demands an ever-increasing slice of a not-so-increasing IT budget. Needs can outstrip capital depreciation schedules making it difficult for IT to upgrade and replace storage devices in support of business initiatives. Migration to new systems is not only time consuming, it often requires operating and paying for old and new systems concurrently, sometimes for extended periods. And because business demands and data growth no longer respect the capital budget process or even acquisition and implementation lead times, you're left to guess high, overprovision, and overpay to avoid being caught short.

**THE BUSINESS IMPACT:**
Storage expenditures that fail to align with demonstrated business value can become an obstacle to IT and the business.

# LET'S MAKE STORAGE SMARTER



When data isn't available when and where it's needed, its value is lost to the business. When managing and operating storage infrastructure is so complex it consumes excessive IT resources, it slows business progress. And when storage acquisition and operations costs exceed returns, it drains investment away from core business initiatives.

Those are the experiences of businesses trying to tap tomorrow's opportunities with yesterday's storage technology. And those experiences have led us to rethink what storage should be, how it should work, and how it should be consumed.

Storage needs to be more than the place where data lives. Gaining intelligence from your data begins with more "intelligent storage." Intelligent storage should deliver built-in artificial intelligence (AI), hybrid cloud interoperability, and consumption based IT. This combination helps you manage, secure, govern, and control data throughout its lifecycle, no matter where it lives, in order to extract insights from it. And for IT organizations charged with driving the digital transformation their businesses need, that's a game changer.

# WHAT IS INTELLIGENT STORAGE?

Data holds the power to transform your business. Intelligent storage holds the power to transform your use of data.

**As autonomous operations become more widespread, customers recognize that the issues they do have left to resolve are becoming more complex, and they need additional instrumentation across more than just the storage infrastructure to troubleshoot and resolve them.**

– IDC, October 2018

Just as advanced analytics helps enterprises find business insight in mountains of business data, advanced analytics can find IT insight in the mountains of data generated in IT infrastructure. And just as AI can learn to drive automobiles and fly airplanes, it can enable IT infrastructure to learn, adapt, and react—a step towards autonomous IT.

Intelligent storage collects data not just from storage devices, but from servers, VMs, network interfaces, and other infrastructure elements across the stack. It uses machine learning to develop models that reflect what's right, so it can spot what's wrong. And it applies predictive analytics to anticipate and prevent issues across the infrastructure stack and to speed resolution when they do occur.

**THE BUSINESS IMPACT:**
Storage with artificial intelligence should help anticipate problems and adjust in real time, so your IT resources can focus more on strategic business goals.

# INTELLIGENT STORAGE

## Supports hybrid cloud interoperability

Just as the new generation of cloud-native applications is designed and built for the cloud, intelligent storage should be built for hybrid cloud operations and mobility.

**THE BUSINESS IMPACT:**
Intelligent storage should accelerate your cloud strategy by letting you run every application in the right place, assure data is where it's needed, and deliver meaningful test data to app development teams, so they can deliver the innovation the business needs.

## Can be consumed as a service

Rather than guess at future needs and overprovision, intelligent storage changes how we provide and acquire storage capacity. Enterprises need elastic capacity and cloud economics, but with on-premises security, control, and governance. Intelligent storage helps them achieve that. It's managed to provide capacity ahead of demand and monitored and operated—in the cloud or on premises.

**THE BUSINESS IMPACT:**
Intelligent storage consumed as-a-service allows you to increase agility without overprovisioning, on-prem or in the cloud.

## REDUCES BUSINESS RISK

Intelligent storage uses AI to adapt to changes in your environment and reduce the risk of change. It prevents ransomware. And it makes data protection and recovery faster.

**Storage that can learn and adapt, predict failures, manage data in complex multi-cloud environments, and deliver insights into the overall operation of business-critical workflows is the foundation of the hybrid cloud world. The increased efficiencies and failure reductions delivered by intelligent storage reduce OPEX while easing the operational burden of IT practitioners.**

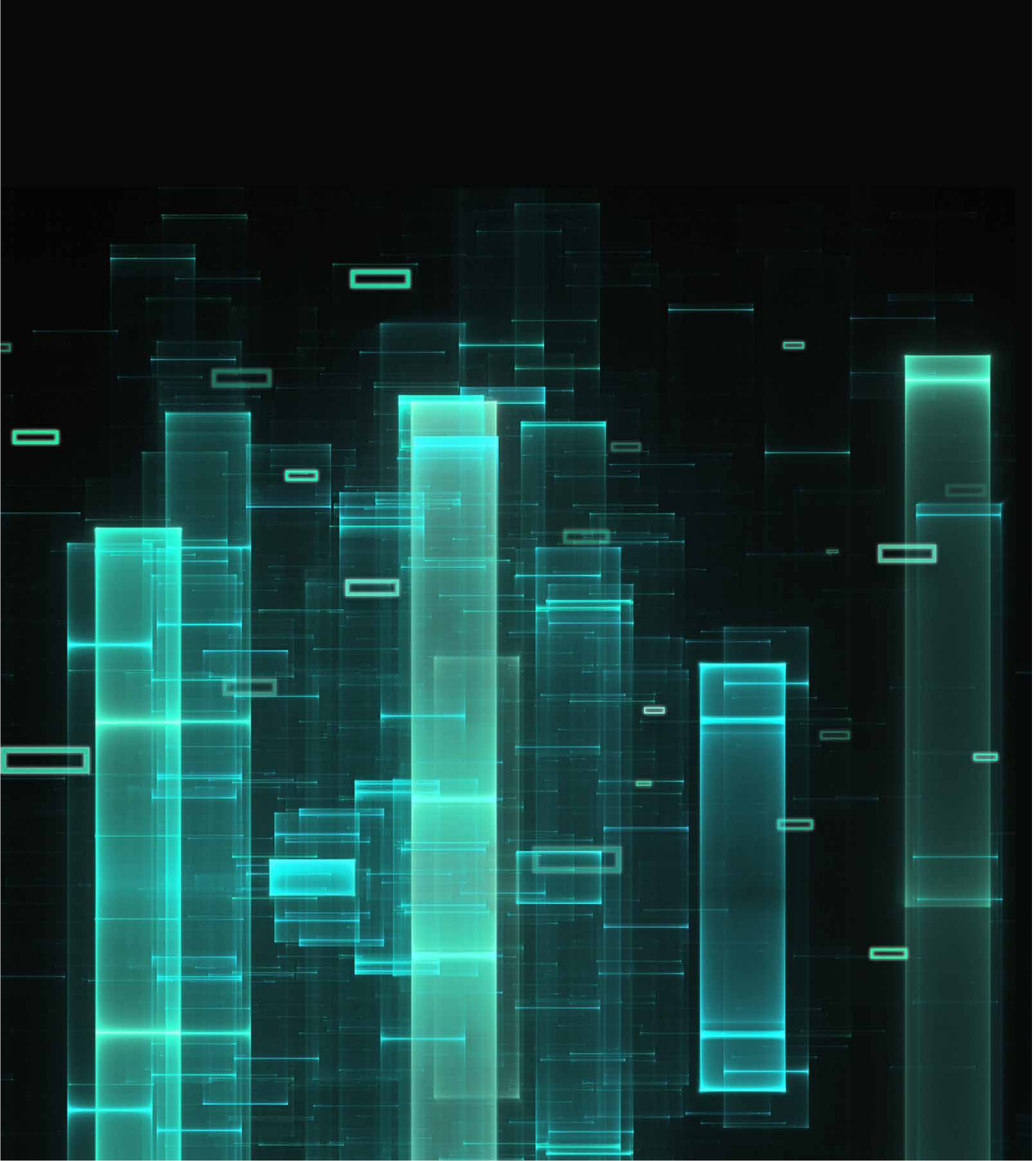
– Moor Insights & Strategy, Intelligent Storage, November 2018

# Take the next step

We can get you there. Services delivered by HPE Pointnext help you plan an intelligent storage environment, identify and quantify the benefits, and justify the investment. We provide expertise to assure a smooth migration. HPE Financial Services provide innovative investment options to take the financial pain out of upgrade and migration. In some cases we can even buy and resell your old systems, returning the proceeds to you to retire any remaining capital value. And we'll help you select the consumption option you need to match expenditures to demonstrated business value.

**WHAT IT MEANS FOR YOU:**
Intelligent storage enables a smart, uniform computing environment across your on-premises, private cloud, and public cloud services to make hybrid cloud work for you.

You can focus IT on the business while the infrastructure takes care of itself—starting today.



# Learn more

Extracting business value from data across hybrid environments is the next frontier. Enterprises that learn to do it anywhere, in near real time will pull ahead of those that do not.

Start today. HPE delivers the most intelligent storage for your hybrid cloud environment—a full suite of products, services, finance, and consumption options.

**Download the intelligent storage white paper or infographic** to learn more. Or **visit our Web site** to learn about HPE intelligent storage solutions.

CSPi Technology Solutions

CSPi Technology Solutions, a Hewlett Packard Enterprise Silver Partner, and an Aruba Platinum Partner, provides the expertise and service scope - including Managed IT Services, Professional Services, and Cloud Services - to help you architect and manage a high-performance, highly available, and highly secure IT infrastructure.

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Learn what intelligent data from HPE could do for your business at tech_solutions@cspi.com or (800) 940 - 1111.



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