

White paper supporting our upcoming **Data Center Reality Check Webinar**





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Regardless of industry or application, the CTO is faced with four key challenges:

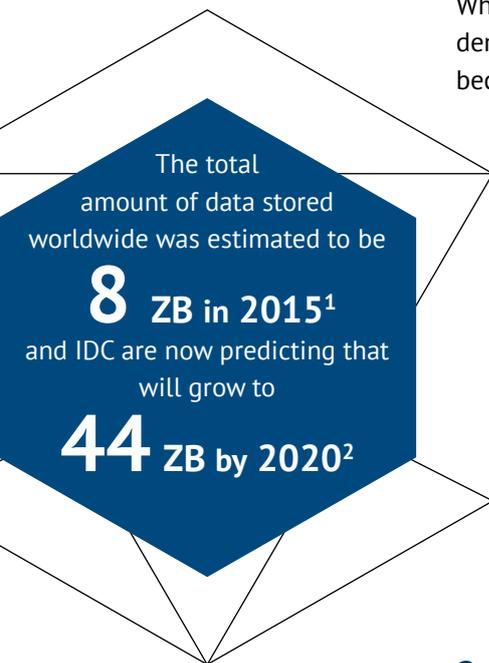
1. Increased storage requirements

Whether your business employs data deduplication technologies or not, data storage demands will only grow. Aside from the organic growth which all businesses have become accustomed to, Big Data and IoT deployments will only accelerate demands for increased capacity.

The total amount of data stored worldwide was estimated to be 8 zettabytes in 2015¹, and IDC are now predicting that will grow to 44ZB by 2020². At least 10% of this growth will come from machine generated data.

Not to mention data retention for compliance purposes. Or the space consumed by duplicate data. Capacity is under threat from every side.

And Gartner estimates suggest that unstructured data grows at a rate of 35% *every year*, so you'll need to double your capacity every two years³.



2. Tighter budgets

Whether they increase year on year or not, IT budgets are unlikely to keep pace with increases in storage capacity. US businesses invest an average of \$1.77 per GB⁴, a sum for which there is no economy of scale.

So as storage capacity increases, the CTO will find that their budget is squeezed simply keeping the lights on. This makes it even harder to invest effectively in new developments that will help support other business growth goals.



3. Improved performance

The speed at which your business accesses data is now a vital competitive advantage. Which means that the CTO needs to develop an infrastructure capable of retrieving and processing a data estate that is growing exponentially.

However, maintaining existing levels of performance will be insufficient; data access speeds need to keep improving if your data is to continue providing a competitive advantage.

“Every 100ms delay costs Amazon 1% of sales.”

Greg Lindan, Senior Manager & Principal at Amazon⁵.

4. Environmental responsibilities

Businesses are under increasing pressure from shareholders and customers to demonstrate their commitment to improving their local area and the wider environment. “Green” policies are an important element of corporate social responsibility (CSR) programs that reduce the environmental impact of your operations.

“Datacenters consume approximately 1.5% of the total electricity used on the planet.”

US Environmental Protection Agency⁶.

That said, increasing energy efficiency, or extending the usable lifespan of hardware both offer cash-based incentives to commit to eco-friendly operations.



What are your options?

Faced with these challenges, the CTO has three main options moving forward

1. Replace existing systems as per the OEM's defined upgrade path.
2. Implement a Cloud migration program as equipment reaches end of service life.
3. Strategically redeploy existing systems to provide additional low-cost capacity.

So how do they work in practice?

New equipment

Tried, tested and expensive following the OEM-defined upgrade path allows your business to gain access to more speed and more capacity for the future. However, this tends to be the most costly option, forcing your company to replace hardware when the OEM demands.

This approach limits potential return on investment and fixes the total cost of ownership, reducing the overall value of the new systems. At a time when 35% of CTOs are trying to reduce capital expenditure⁷, the OEM-enforced upgrade cycle simply does not fit with most business plans.

Cloud alternatives

The most fashionable of options, Cloud adoption promises to lower capital spend and permanently end questions surrounding total cost of ownership. And the promises of unlimited scalability, processing power and availability are seductive.

But questions about security, sovereignty, service costs and data portability dog Cloud services. 70% of Cloud apps in use by European enterprises prior to the Safe Harbor meltdown were already non-compliant⁸ – and ongoing confusion about the global transfer of data means that many more may find themselves in trouble soon.

This uncertainty means that many businesses are forced into adopting private Cloud solutions, further increasing the cost of such services.



Strategic redeployments

Often overlooked – particularly as OEMs try to scare customers into staying on the endless upgrade cycle – is the strategic redeployment of existing assets. By partnering with a third party support and maintenance provider, it is possible to begin a cascade-down replacement program to replace the oldest systems with new, more efficient hardware.

This then helps to improve the baseline speed of even the least used platforms (like archiving) to deliver performance improvements across the whole IT estate. And lower total cost of ownership. And improve return on investment.

Even if your business does choose to upgrade key components at some point in the future, delaying or spreading that capital spend can create savings of between 40 and 50%.

Uncovering the secrets your OEM is keeping from you

Although the demands placed on the CTO are increasingly rigid, a range of solutions are available, providing flexible alternatives for every challenge. But you may need an experienced partner to help you properly assess which is right for your business.



Reality Check time

A reality check will allow you to cut through hype and misinformation to properly assess your storage future using what you already have, and the real life expectancy of modern storage hardware. This will help you lower CTO and free up cash for investment in other projects.

And if you register for the CDS Reality Check webinar we'll show you how to extract even more value. How a third party maintenance provider can extend the lifespan of your equipment Cut support costs and source OEM-approved spare parts for EoSL equipment.

Hear from our clients the American Red Cross, Lord Abbett & Co, and a use case from PayPal, on how they all increased ROI and reduced TCO, through working with a TPM.

On the webinar we will have **Keith Koo, Managing Partner, Guardian Insight Group**, talking about his experience with PayPal.

We'll hear from **Joseph Armenti, Production Support Engineer at Lord, Abbett & Co**, the large investment house based in New Jersey.

Also attending is **Kannan Thiyagarajan fom the American Red Cross**. He is their Director of Service Delivery and will talk about his experiences with the value a third party maintenance provider can provide.

If you're serious about building an asset management strategy for the future, you cannot afford to miss the [CDS Reality Check webinar](#).

[Sign up now at cds.net](https://cgs.net).



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Multi-vendor | Multi-Platform | Multi-System | Single Point of Contact

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