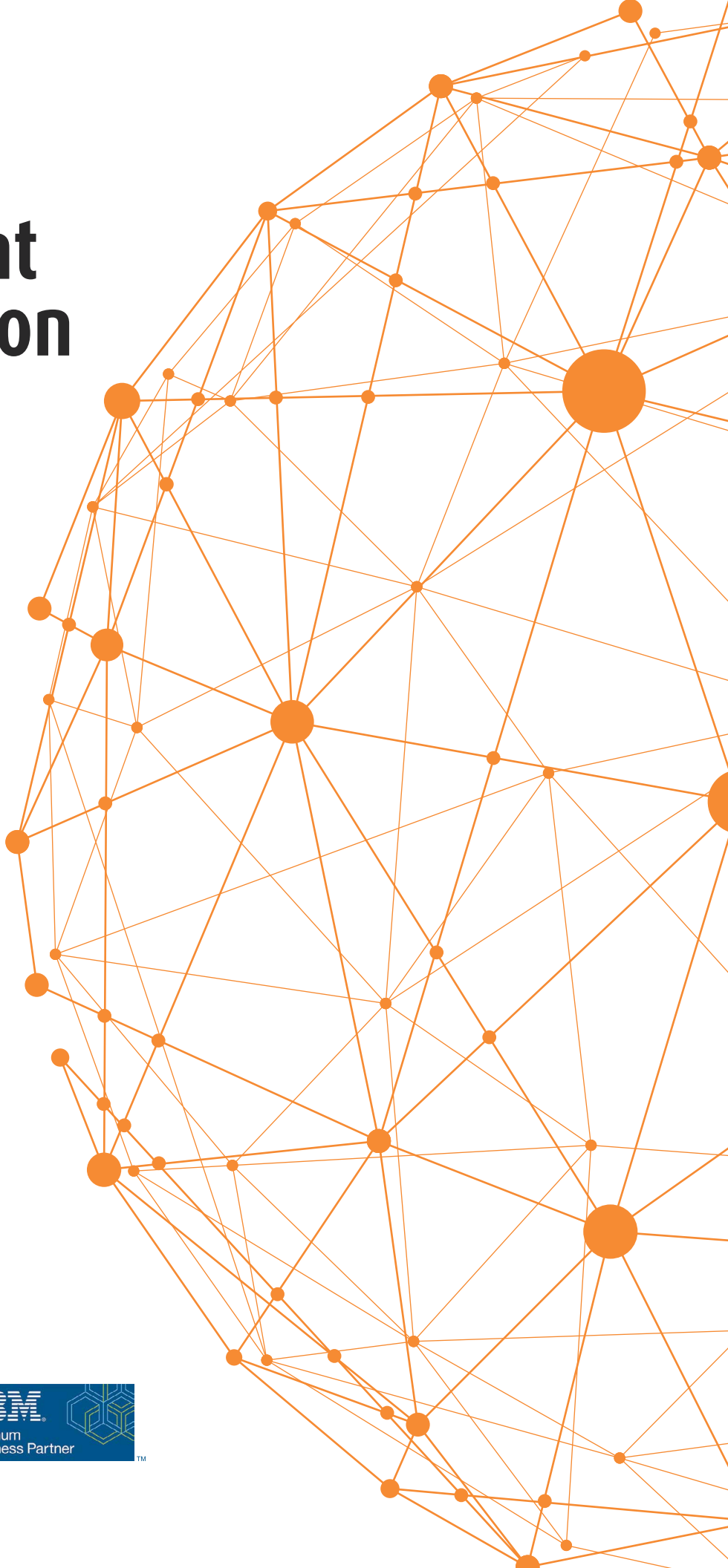


# Storage Management Modernization

Integrate new technology with existing infrastructure to address rapid data growth and demand.



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## INTRODUCTION

*Why your storage strategy shouldn't be keeping you up at night*

*“...it doesn't have to be difficult to leverage new and emerging technologies to stay advanced.”*

Is your storage strategy creeping into your mind at night like a bad horror movie where you're not sure how it will end? Well, you're not alone. A whopping 70% of organizations are feeling the same pain as they peer out on the storage horizon and try to get a handle on data growth, demand and capacity.

If you're an avid consumer of research, trends and analysis reports, you won't be surprised to hear that all signs are pointing to the need to rethink your storage strategy.

While the costs associated with storage are dropping, the demand for data and data-driven, mission-critical applications is growing at a far rapid pace, offsetting potential savings. Not to mention, the need for flexibility and agility to deal with those increased data requirements.

IT modernization and building resilient IT infrastructure continue to be important objectives for IT leaders. But it doesn't have to be difficult to leverage new and emerging technologies to stay current. You can be leading instead of reacting by future-proofing your infrastructure. It is also possible to integrate new storage technologies with your existing infrastructure that actually help mitigate disruptions, and improve data availability and protection to create peace of mind — especially for your critically important data. No more sleepless nights.

IT personnel and executives consider that data management and analysis are more essential to the future of their businesses than quarterly earnings, corporate reputation, or even customer service.<sup>1</sup> CIOs today are expressing excitement over the competitive advantage that insight into their data can provide their organization. But, there's a big problem — they can't easily get their hands on it.

And we're not talking AI or machine learning here either.

Gone are the days of managing terabytes. We're in an era of petabytes, exabytes, and zettabytes, words we would not have entertained when we first started storing data.

So what's a storage architect to do when faced with a data storage and demand challenge? We're going to shed some light on how you can get ahead of this dilemma, potentially extend the infrastructure you've got in place today and find savings in TCO by investing in new technologies. There is light at the end of the tunnel. With the right solution, you can rest easy, avoiding increased costs and resource requirements, and get the flexibility to meet the storage demands you face every day.

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## NO PAIN, NO GAIN?

Traditional enterprise storage solutions are struggling to keep pace with the overwhelming growth of business data. As your company introduces more data-driven applications and reporting needs, your capacity for data stability starts to diminish. This isn't a problem that's going away — it's one that's rapidly increasing. In fact, IDC estimates that daily digital interactions will grow by more than a factor of 20 over the next 10 years.<sup>2</sup>

The most common issues that face IT teams today are not limited to IT alone. Lines of business have growing needs for data and data-intensive applications. As such, IT teams need agile systems to respond to changing workload and data demands. Organizations today need storage solutions that can scale up and scale out quickly when capacity is reached. They also need to take a hard look at their existing infrastructure and make decisions on what they can and should keep and maintain, and where they need to refresh and modernize. IT leaders understand how critical these issues are as each business group is increasingly reliant on timely and accessible data. Without a flexible storage strategy, the business as a whole will feel the impact.

Rest assured, you're not alone in this situation.

An independent study performed by Loudhouse surveyed over 1,200 senior IT decision makers about data storage solutions. The study found:

- 70 percent of IT organizations have revised their storage strategy in the last 12 months due to frustrations associated with storage costs, performance, complexity and fragmentation of existing solutions.
- An average of only 7 percent of IT budgets are allocated to data storage.
- Senior IT staff report being frustrated with the performance of their existing storage solution.
- 71 percent of respondents said storage systems were complex and highly fragmented.

“  
...daily digital interactions will grow by more than a factor of 20 over the next 10 years.”

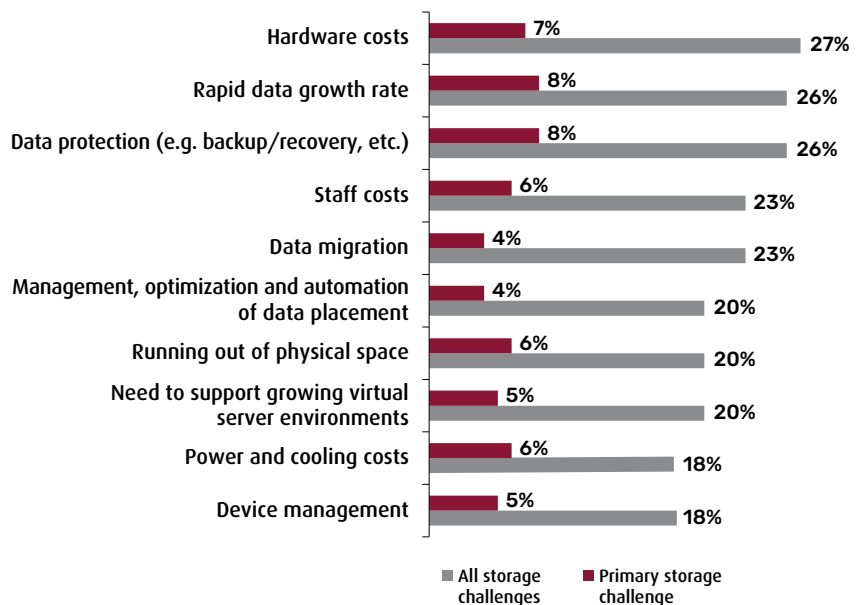
# NO PAIN, NO GAIN?

Continued

Unless you're in the top 30% of organizations who have found Zen with their storage systems, you too are likely in the majority who are eager to solve this problem. The top two challenges most often cited are "hardware costs" and "rapid data growth." It's no wonder that the ongoing demand for applications like business intelligence, analytics and data-driven reporting are starting to eat up more of the capacity of current systems.

**Figure 1: Top Ten Biggest Challenges in Today's Storage Environment**

*In general, what would you say are your organization's biggest challenges in terms of its storage environment? Which would you characterize as the primary storage challenge for your organization? (Percent of respondents, N=373, top ten shown)*



“ The top two challenges most often cited are “hardware costs” and “rapid data growth.” ”

With an average of only 7% of IT budgets allocated to data storage, finding an effective solution starts to feel pretty daunting. Especially one that meets your data capacity and growth needs without requiring more resources.

## THE TIMES, THEY ARE A CHANGIN'

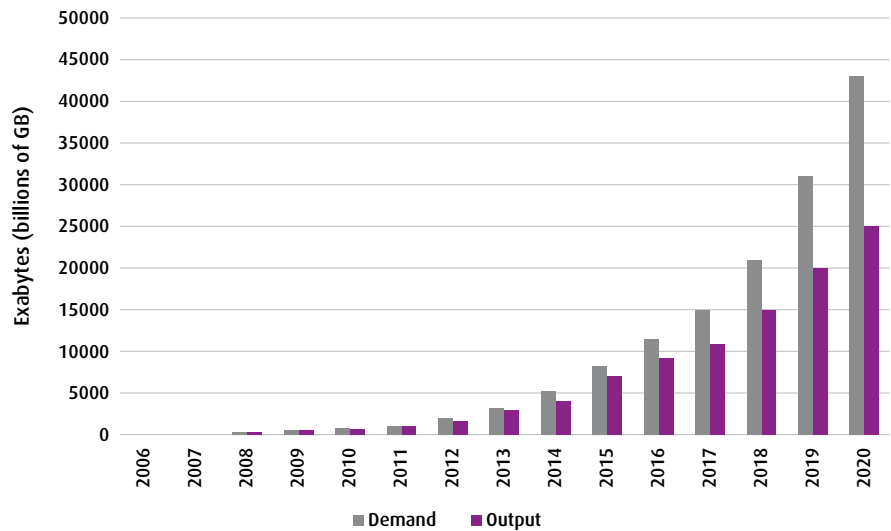
“By 2020, the demand for data will outpace supply by double.”

Traditional data storage systems and solutions were built at the outset to deal with a specific task or project, fashioned with relational databases and not necessarily designed for velocity, sharing and rapid growth. Think SQL and the RDBMS structures that we have grown accustomed to. Not only does velocity change the game, so does any unstructured data, which these systems aren't equipped to handle. Add in the silos that are present in your current system and the limitations start to mount.

Perhaps you have an array system or a tiered silo system where each business application is aligned to a silo based on demand and business need. Moving data from system to system or silo to silo is impossible or simply requires too much effort. With legacy hardware infrastructure and management software in place, it's difficult to accept that modernizing may require a full rip and replace of your current infrastructure.

The reality is, you can't afford to wait. By 2020, the demand for data will outpace supply by double. That's only two years away and we know you're probably already feeling the pain with your current solution.

### Storage Supply & Demand



With data demand and growth outpacing storage capacity, it's time to look at options that are agile, flexible, and deliver on ease of use and ROI. As well, exploring solutions that can work in conjunction with what you have in place, even if you still have some older systems, should not be overlooked.

Knowing that this area will continue to evolve, so should your solution. Let's take a look at IBM Storwize®.

# THE IBM STORWIZE FAMILY MIGHT JUST BE YOUR NEW BEST FRIEND

With IBM Spectrum Virtualize™ software built-in, the IBM Storwize family is a solution designed for storage virtualization that includes technologies that both complement and enhance virtual environments. This helps organizations to achieve a simpler, more scalable and cost-efficient IT infrastructure.

## IBM Spectrum Virtualize™



Keeping pace with innovation, the Storwize family offers integration points that enable efficient and cost-effective storage solutions that will accommodate dynamic needs and business priorities. There are a wide range of storage solutions options aimed at delivering advanced capabilities that are easy to deploy while staying budget friendly.

IBM Storwize solutions play well with others and enable you to merge existing IBM and non-IBM storage solutions, including all-flash, hybrid and legacy components. These are also all managed from a single console — seriously.

If you need to deliver better application performance, Storwize has you covered with the ability to prioritize key workloads through IBM Easy Tier®.

With Easy Tier enabled, data hot-spots, typically created on spinning disk, are eliminated because workloads get promoted or demoted up (to flash) or down (to spinning disk) depending on the data's performance requirements. For example, consider financial systems that run "hot" at quarter-end, and fairly "cold" at non-peak times. Storwize does this automatically, without human intervention by monitoring data pattern access on a regular basis.

The Solid-State Drives (SSD) in IBM Storwize use flash memory for persistent storage. Because SSDs have no moving parts, they can yield a much higher read-write performance. It's common to see flash perform up to 25 times faster than spinning disk storage solutions<sup>3</sup>. And with mission-critical data, the faster the better. You can quite literally add a "dash of flash" to spice up your system and unleash your data-intensive workloads.

“...merge existing IBM and non-IBM storage solutions, including all-flash, hybrid and legacy components.”

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## THE IBM STORWIZE FAMILY MIGHT JUST BE YOUR NEW BEST FRIEND

*Continued*

Adding IBM Storwize to your data center can deliver significant performance improvements, operational efficiencies and savings as well. According to one IDC report, not only were customers able to get 6 times better reliability and availability, they were also able to take advantage of 4 times better CPU utilization, 35 percent reduction in admin and operating costs, and 40 percent less energy and floor space requirements.<sup>4</sup>

Top all that off with IBM Storwize's inline compression capability, and you can store up to 5 times the amount of data that you would normally store without compression.<sup>5</sup> This frees up capacity, avoiding the need to purchase additional storage.

Storwize definitely gets high marks for making things easier and more efficient. It is well positioned to work with current and growing systems to meet your needs today and into the future. Here are some other benefits to show you why it's worth a deeper dive:

- *Comes with built-in migration capabilities. When migrating to new storage or adding to an existing Storwize environment, you can eliminate storage downtime with non-disruptive movement of data from one storage resource to another.*
- *Consolidates storage — regardless of hardware vendor — for simplified management, consistent functionality and greater efficiency.*
- *Supports common capabilities across storage types, providing flexibility in storage acquisition by allowing a mix of vendors in the storage infrastructure. For instance, it supports more than 400 non-IBM storage offerings.*
- *Injects new life into older systems by leveraging the functions of Storwize with those legacy systems. No need to decommission an older system prematurely.*
- *Ability to scale within Storwize to easily turn on capacity when you need it (available with Storage Utility Offering features).*
- *Capitalizes on what you already have to maximize costs savings through data-reduction pools, which provide de-dupe and compression.*
- *Avoids the need to rip and replace your infrastructure by tapping into external virtualization and clustering capabilities, helping you extend the life of your existing infrastructure investments and steering clear of siloed systems.*

“...store up to 5 times the amount of data that you would normally store on existing disk based solutions...”



# THE IBM STORWIZE FAMILY MIGHT JUST BE YOUR NEW BEST FRIEND

*Continued*

If you're still not convinced that IBM Storwize is worth investigating, take a peek at the learnings from a study done by ESG on the economic value validation results when they evaluated IBM Storwize. See the full paper [here](#).

- An estimated 220% ROI over the baseline of traditional storage arrays.
- Average payback period was 5 months.
- Total cost of ownership was lowered by 59%.
- Increases in IT efficiency include savings in areas like reduced storage spending and administration labor requirements, and fewer helpdesk issues.
- User improvements include value delivered to the user community in terms of time savings on behalf of enterprise application users.

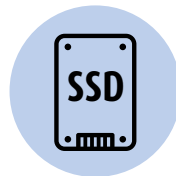
“An estimated 220% ROI over the baseline of traditional storage arrays.”



**59%** reduction in cost of ownership



**40%** less energy & floor space requirements



**25%** increase in read-write performance with Solid State Drives (SSD)



**35%** reduction in admin and operating costs



**Payback period** of 5 months on average



**Over 6 times** improvement in reliability & availability

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## SUMMARY

If you're currently building your data storage strategy or reevaluating your current system, it couldn't be a better time to look at IBM Storwize. The world of data storage and demand is rapidly changing. These changes are often occurring faster than we're prepared for, leaving us spending money and time on band-aids just to keep up.

Quick-fix or temporary solutions rarely work well and almost always cost more in the long run, not to mention the inefficiencies and sub-par performance. Evaluating a solution that will evolve and grow with new data storage challenges and opportunities will have you well positioned for data center success.

### Why Softchoice:

#### Softchoice is Uniquely Poised to Support your Data Center Strategy

Softchoice works with you to transform Hybrid IT environments, and govern them with agile infrastructure, data protection and high availability. By wrapping our arms around your traditional infrastructure, we can determine the best locations for your business applications, aid you in securely adopting the Public Cloud and successfully transform your data center. With a Softchoice solution, you get a tailored roadmap to fit your unique workloads, and expert mentorship every step of the way.

“  
...you get a  
tailored roadmap  
to fit your unique  
workloads...”



#### Data-Driven Insights:

Thorough assessment of your current environment, with recommendations specific to your desired outcomes.



#### Licensing Selection and Software Asset Management:

Navigate the complexity of vendor consolidation, licensing and asset management.



#### Enterprise Grade Managed Services:

Thorough assessment of your current environment, with recommendations specific to your desired outcomes.



#### Technology Mentorship:

One-on-one, or event-style coaching to develop the skills of your team, and keep up with the pace of innovation.

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## SUMMARY

*Continued*

### Why IBM:

The Storwize family of products from IBM, a recognized leader in the storage industry, is known for providing efficiency, flexibility and high-performance storage for any type of workload. IBM storage offerings customized for small, mid-sized and large organizations are specifically designed to deliver performance in streamlined packages that are easy to buy, deploy and manage.

**To learn more about how to get set up for success with your storage strategy, contact Softchoice today at 1-800-268-7638 or visit [www.ibm.softchoice.com](http://www.ibm.softchoice.com).**

#### Sources:

- <sup>1</sup> Quadrant Strategies: Poll with IT Executives and IT Personnel, 2017
- <sup>2</sup> IDC: Monetizing data in the Global Datasphere, 2017
- <sup>3</sup> Softchoice: Flash Forward – Making Flash Storage a Reality for the Mid-Sized Business, 2018
- <sup>4</sup> IDC: Justifying Investment in All-Flash Arrays, August 2016
- <sup>5</sup> Softchoice IBM Storwize infographic statistic

