sierraexperts

THE COST OF DOING NOTHING

Why Delaying a Storage Upgrade Impacts Growth

IBM Silver Partner

EXECUTIVE SUMMARY

You've likely heard the phrase, "If it's not broken, don't fix it." For many business leaders, that adage extends to IT infrastructure. If the storage system works, why touch it? But here's the catch. What appears to be working fine today might be quietly draining your bottom line tomorrow.

This white paper examines the substantial business risks associated with delayed storage modernization and demonstrates how proactive upgrades directly contribute to business growth, operational resilience, and market leadership.

For C-suite executives and technology decision-makers (that's YOU!), understanding the comprehensive impact of storage infrastructure on business outcomes has never been more critical. The decisions made today about your data foundation will shape your organization's ability to capitalize on emerging opportunities, withstand security threats, and outpace competitors in the years ahead.

INTRODUCTION

The Storage Paradox

Most business leaders recognize data as their most valuable asset. Yet the very infrastructure that houses this asset often receives less strategic attention than other technology investments. This disconnect creates what we call the "Storage Paradox" – while data volumes and demands grow exponentially, the underlying storage systems remain static until they reach critical breaking points.

The consequences of this approach extend far beyond IT operations. When organizations delay storage upgrades, they unknowingly accept a series of business limitations that gradually erode competitive positioning. These limitations manifest in reduced agility, compromised security posture, and missed opportunities for innovation – all of which directly impact the bottom line.

> Research indicates that traditional storage systems struggle with scalability, performance, and costeffectiveness when handling massive datasets.

Explore why industry leader IBM's storage infrastructure deserves strategic consideration at the highest levels of organizational leadership, and how timely upgrades create tangible business advantages that drive growth and the IT management that works on the upkeep of data flow behind the scenes.

DATA STORAGE IS A STRATEGIC ASSET

Turn IT Burdens in Business Advantage

Think of your storage not as a cost center, but as a driver of growth. When it works well, it powers productivity, innovation, and customer satisfaction. When it lags, it slows all three.

Upgrading doesn't just solve technical problems. It aligns your infrastructure with your business goals. It's an investment that pays dividends across departments.

One common reason decision-makers hesitate to upgrade is fear of disruption. Migrating data, re-training teams, updating protocols. It sounds like a heavy lift.

The Reality of IT

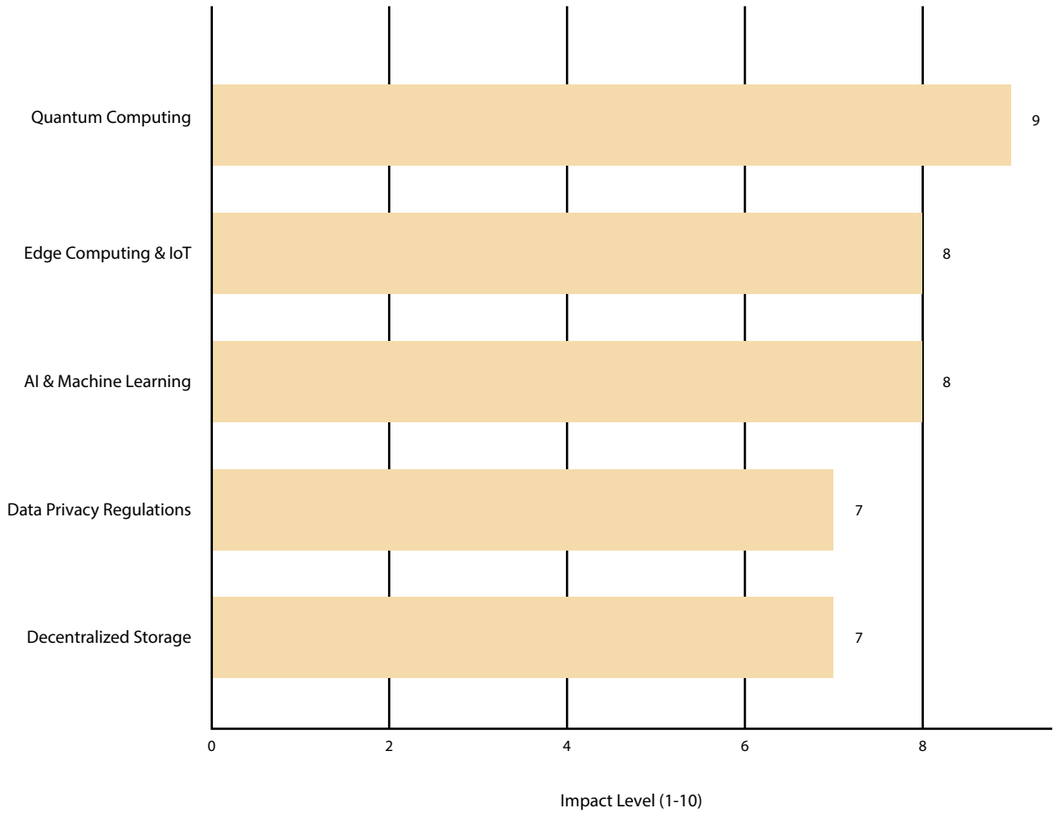
The reality? Many modern storage solutions, especially those offered by experienced IT providers like Sierra Experts, are designed for smooth integration with minimal downtime.

You don't need to overhaul your entire system overnight. You can scale as you go, with expert support at every step.

BUSINESS DISRUPTORS

Downtime and Data Loss Aren't Just IT Problems

Top 5 Disruptors in Storage Industry



When a legacy system fails, it doesn't just slow down processes - it halts them. Recovery from outages and data loss can cost thousands, if not millions, in revenue and customer trust.

Newer storage solutions offer built-in disaster recovery, continuous availability, and data replication. These aren't bells and whistles, they're guardrails for your entire operation.

Cyberattacks, power outages, hardware failures. These aren't ifs, they're when's. The question is whether your current system is ready for them. Delaying an upgrade can turn an avoidable hiccup into a full-blown crisis.

TRADITIONAL VS. ENTERPRISE STORAGE

The Evolution of Data Storage

The physical deterioration of legacy storage media presents an urgent challenge for data preservation. Magnetic tapes, once the backbone of enterprise backup systems, typically have a viable lifespan of 10-30 years depending on storage conditions. Even under optimal circumstances, chemical degradation, magnetic field decay, and physical wear inevitably compromise data integrity.

The evolution timeline of data storage has gradually progressed from early methods like punch cards and magnetic tapes to modern technologies such as cloud computing and solid-state drives, quietly shaping the way we store and access information over time.

For example, a financial institution had maintained customer records on Digital Audio Tapes (DAT) from the 1990s, only to discover during a compliance audit that approximately **18% of the tapes** had developed read errors, with complete data loss occurring in **3% of cases** despite climate-controlled storage.

In scenarios like this, DAT tapes eventually got replaced with compact discs, which could ultimately hold more and perform at a higher capacity. Looking at it in terms of traditional storage, an upgrade to Flash storage can increase performance by 10x. The same way that DAT tapes are now considered obsolete, we can assume traditional data storage systems' heyday is coming to an end.

Tech Fun Fact

Early DAT tapes could hold up to 8GB of data, while later standards like DAT 160 could store up to 160 GB.

Is Legacy Storage Really A Legacy?

If your business is still running legacy storage, it can cause negative affects and often cause physical degradation. Legacy storage systems present unique challenges for modern organizations.

As technology evolves at an accelerating pace, many businesses find themselves managing a complex mixture of outdated storage infrastructure alongside contemporary solutions. This comprehensive guide examines the primary challenges and provides strategic approaches to address them effectively.

Organizations often find themselves burdened with legacy storage systems that have accumulated over decades of operation.

These systems, ranging from magnetic tape archives to obsolete hard drive formats and proprietary storage solutions, represent not just technological artifacts but critical repositories of organizational knowledge and history.

The challenges of maintaining, accessing, and eventually migrating this data have become increasingly complex as hardware becomes obsolete, software support diminishes, and the specialists familiar with these systems retire or move on.

GROWTH ISN'T OPTIONAL

Your Infrastructure Shouldn't Be Static.

Your company is generating more data than ever, whether it's customer analytics, internal documentation, or digital services, every department relies on fast, secure, and accessible data.

Legacy storage systems weren't built for the scale or complexity of today's data demands. They struggle with volume, speed, and flexibility, especially when cloud integration and hybrid work environments come into play.

Modern flash storage solutions, like IBM FlashSystem, are designed to grow with your business. They offer high-speed access to data, lower latency, and seamless hybrid cloud compatibility. Delaying an upgrade creates a bottleneck, one that limits your agility in responding to market demands.

IBM FLASHSYSTEM

Hybrid Multicloud Strategy

Hybrid multicloud refers to an IT infrastructure strategy that combines onpremises systems with private and public cloud services from multiple providers, allowing organizations to leverage the strengths of each platform. This approach enables businesses to maintain their existing systems while integrating modern cloud solutions to reduce costs and scale operations effectively. It also facilitates the selection of the most appropriate platform and technology for each specific task or project.

Hybrid Multicloud

A hybrid cloud is a type of cloud computing that combines on premises infrastructure, or a private cloud, with a public cloud. Hybrid clouds allow data and apps to move between the two environments.

Storage Upgrade Strategy

- Which data is more frequently used for business needs.
- Which data is less likely to be used.
- Which data will be needed in a disruptive event.
- How quickly data can be retrieved from a storage system or location.

Cloud Consulting

IBM offers cloud strategy consulting services to support business and innovation.

- Hybrid multicloud consulting
- Enterprise operating model
- Cloud migration
- DevOps transformation

Storage Upgrade Strategy

No, companies upgrading data storage are not required to use a specific cloud provider, however choosing the right IT partner to manage your data is an integral part of your data strategy.

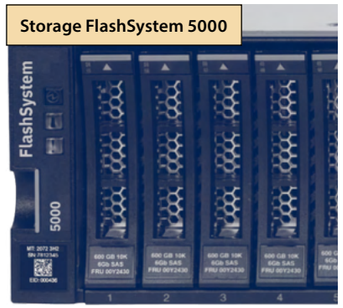
Sierra Experts offers on-premises and cloud-based backup and disaster recovery services.

High-Performance Family

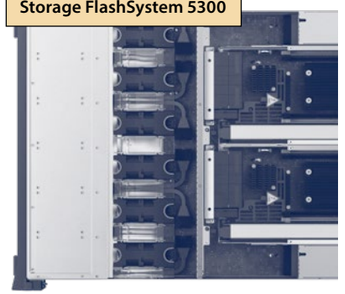
The IBM FlashSystem platform has evolved and adapted to changing requirements. With improved flash management and durability, hardwaredriven data reduction and encryption, and a redesigned FlashCore form factor, the technology has taken a big step forward. New hybrid cloud capabilities and the integration of NVMe are just a few of the many upgrades shaping the future of storage.

The IBM FlashSystem family currently consists of models designed to address the full range of application workload and cost requirements. Every solution comes with the intelligence and capabilities needed to make deployment and management of hybrid cloud architectures simple for any enterprise:

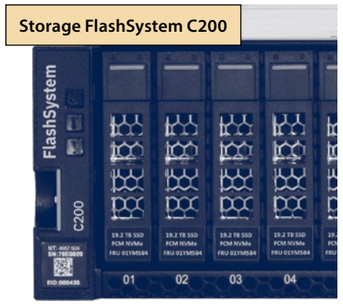
Storage FlashSystem 5000



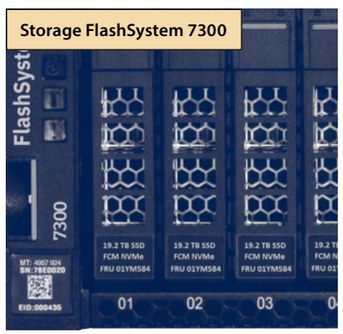
Storage FlashSystem 5300



Storage FlashSystem C200



Storage FlashSystem 7300



Storage FlashSystem 9500

TRY BEFORE YOU BUY

Request a remote demo or an on-premise trial

Request a Demo →

CHOOSING THE RIGHT PROVIDER

Sierra Experts Makes a Difference

Stay Secure

Cybersecurity is more than firewalls. It's about protecting your data where it lives. Legacy storage can't keep up with today's ransomware and zero-day threats. IBM Flash storage, paired with Sierra Experts' cybersecurity and compliance services, offers built-in encryption, threat detection, and faster recovery. Don't wait until a breach happens. Strategize to prevent risks from the start.

Speed Matters

Managing and maintaining outdated storage systems can drain time, resources, and productivity. Legacy solutions often require constant upkeep, leading to unexpected downtime and growing maintenance costs.

Sierra Experts takes the stress out of storage upkeep, legacy or enterprise that will help you stay focused on your business and not your storage.

Sierra Experts, in partnership with IBM, offers a suite of storage and IT services designed to support growth, cyber resilience, and data management. Contact us today to learn how we can help you optimize your data storage and secure your future.

START THE CONVERSATION

It is Time

Start the conversation and take the next step towards a faster, safer, smarter future.

To learn more about IBM FlashSystem and how Sierra Experts can support your upgrade journey, visit Sierra Experts' partnership page or contact us directly at 412.722.1700.

Become an IBM Partner | Contact Sierra Experts | Explore our Data Center

2024 Pittsburgh Business Times FAST 50 — Pittsburgh's Fastest-Growing Companies

2023 Pittsburgh Vetrepreneur of the Year

The Channel Co. CRN MSP 500 2025

Top IT Services Clutch Firms 2021

Corporate America Today Annual Awards 2025

RESOURCES

Why Traditional Storage Systems Fail To Support Big Data | Pure Storage.
https://www.purestorage.com/au/knowledge/why-traditional-storage-fails-big-data.html

Agrawal, R. Big Data Management Challenges.
https://www.researchgate.net/publication/339672487_Big_Data_Management_Challenges

Mullins, C. (2019, August 15). Hybrid Multicloud: A mouthful, but the right approach. IBM.
https://www.ibm.com/think/insights/hybrid-multicloud-amouthful-but-the-right-approach

IBM. IBM FlashSystem Family Data Sheet.

Disaster recovery: Backups: Managed services. Sierra Experts. (2024, August 23).
https://www.sierraexperts.com/managed-services/backup-and-disaster-recovery/