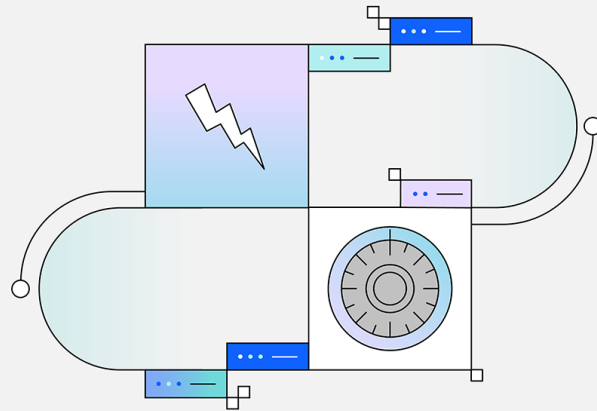# A CIO's Guide to Building Sustainable and Cyber Resilient Storage Systems

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By Anil Kumar Nayak

Amidst evolving climate regulations and environmental concerns, CXOs are increasingly seeking ways to make their IT infrastructure energy efficient without compromising on performance and availability. In fact, according to a study conducted by the IBM Institute for Business Value, almost 50% of CEOs said increasing sustainability is one of the highest priorities for their organization in the next 2 to 3 years, compared to about a third in 2021.

With 84% of enterprises actively pursuing digital transformation, storage requirements have evolved. Data growth rates average at least 30–40% per year for many enterprises, which find themselves managing multi-petabyte data sets. Hence, the storage infrastructure must be agile, efficient, and deliver consistent performance at scale.

Storage is a critical constituent of the IT infrastructure. With the advent of emerging workloads such as artificial intelligence (AI) – agility, efficiency and the ability to deliver consistent performance at scale have become primary factors driving enterprise investments in storage solutions.

Key Factors to Consider

How do you determine which storage vendor to trust and partner with? As several vendors today offer competitive solutions in the marketplace, you should consider innovation designed from the ground up.

- **Management and operational simplicity:** You can achieve faster response times with low latency and high availability by using flash storage for mission-critical workloads. Further, flash storage allows you to streamline operations with a consistent storage software platform that provides enterprise-grade all-flash and hybrid flash capabilities across environments. Further, data management and support can be streamlined by optimizing storage and networking with predictive analytics and AI-infused capabilities.

- **Cybersecurity:** Equip the business to go beyond data protection to real data resilience. For example, the [IBM Storage Defender](#) provides visibility for end-to-end data resilience across primary and secondary workloads.

- **Power-efficiency and performance:** Data center power consumption has become a top priority for businesses. As your business expands its data center infrastructure, you need to carefully examine whether your high performant and secure systems are power-efficient in the long run. You should bear in mind that digital transformation and sustainability are interlapping areas for key stakeholder groups and they also shape brand perception and customer loyalty.

Why choose IBM?

IBM Storage FlashSystem, powered by [IBM Storage Virtualize](#) and [IBM Storage Insights](#), can optimize your storage infrastructure using predictive analytics and cloud-based management and support. More importantly, the IBM Storage FlashSystem platform family is designed for comprehensive [data privacy and cybersecurity preparedness](#), from protection and prevention to detection, resolution and retention. Further, these solutions consume 29% less energy than a market-leading competitor.

This is in fact what led **[Genus Power Infrastructures Ltd.](#)**, India's leading smart meter manufacturer to IBM. Genus set out to look for a Non-Volatile Memory express (NVMe)-a ready storage solution that could run its home-grown applications and deliver the highest throughput and fastest response time for its enterprise workloads. Additionally, Genus wanted a solution that would make it easy for the company to implement SAP HANA.

After implementing IBM FlashSystem, Genus saw immediate improvements in storage optimization, speed and business continuity. IBM Storage Insights provided their team with a look into what's happening on the block level of the system itself. This level of control has allowed them to make better strategic decisions going forward, including the implementation of big data and predictive analytics.

In conclusion, IT decision-makers must have a clear understanding of the performance and capacity objectives before acquiring any system. In addition to the total cost of ownership of enterprise storage, they should also consider the incentives offered by power-efficient storage systems, as this will have a huge bearing on their IT and organizational roadmaps.

Sign up [here](#) for the webinar on 'Risk to Resilience with IBM FlashSystem' on Thursday, August 10, 2023, at 3:00 PM IST.

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