



The Innovation Race

*Reducing Risk and Navigating the
AI Frontier for **Future Success***



Content

The Pure Storage Innovation Race report series aims to maintain a steady pulse on the unique insights and perspectives of Global Chief Information Officers (CIOs) and senior IT leaders.

Designed to assess the current state of innovation, this series of reports explore the data trends shaping modern IT and the future of the enterprise, revealing both the challenges and the boundless opportunities that lie ahead.

This report is based on a recent survey of 1,500 CIO and IT decision makers, conducted by independent market research agency Vanson Bourne and commissioned by Pure Storage.

Methodology

Pure Storage partnered with independent market research agency Vanson Bourne to conduct a research study of 1,500+ global C-level (chief information officers, chief technology officers, or equivalent) and decision maker IT respondents in US, EMEA (UK, France, Germany) and APJ (Australia, Japan). Respondents came from organizations with 1000+ employees and from a variety of private and public sectors with a specific focus in financial services, telecoms, healthcare, and retail.

All interviews were conducted using a rigorous multi-level screening process to ensure that only suitable candidates were given the opportunity to participate.

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Introduction

Today, CIOs and other senior IT leaders find themselves at an important crossroads.

While the rise of artificial intelligence (AI) brings exciting prospects to businesses across every industry, a substantial focus on risk management is hindering innovation for many. Tipping the balance in favor of innovation is imperative for businesses to remain competitive, yet it is equally important to ensure that the decisions made are future-proof. Solutions, tools, and strategic partnerships must be fit-for-purpose for the long-term if the modern business is to cross the finish line in the innovation race.

Read on for more key learnings and recommendations from our flagship Innovation Race research.

Some of the Overwhelming Views From CIOs and IT Leaders Include:

AI

80%

Are worried that their business will be left behind if their infrastructure can't support AI fast enough

81%

Believe that AI-generated data is likely to outgrow their organization's current data centers

RISK

63%

Would personally prefer to spend more of their time on innovation (as opposed to risk)

98%

Agree that their organization's infrastructure needs improvement to support risk and innovation initiatives



01 Risky Business

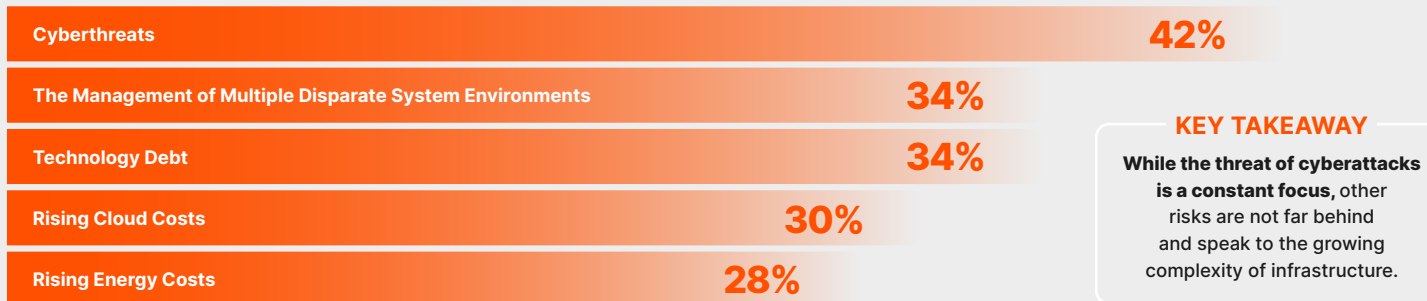
“As important as it is that risk be managed, we have more than enough specialists overseeing cybersecurity and risk assessment. What we need the most are improvements and innovations in our infrastructure and customer experience.”

IT DECISION MAKER (ITDM), MANUFACTURING AND PRODUCTION, US

Risk is inevitable in business.

The complex and dynamic nature of the IT landscape means that risks come in many different forms, impacting multiple areas across both the IT department and the wider business. It makes sense then, that **86% of surveyed IT leaders place the reduction of their organization’s risk profile as their top priority.**

According to IT Leaders, the Risks Having the Greatest Impact Include:¹



While the threat of cyberattacks is a constant focus, the other risks speak to the growing complexity of infrastructure. Acquisitions and quick fixes in the technology suite mean that many businesses are struggling with systems that are not well integrated or fit-for-purpose. Combined with the growing cost of cloud, and the rising cost of running data centers, this creates a perfect storm of wasted resources and excessive spending that CIOs must get under control.



02 The Innovation vs. Risk Management Struggle

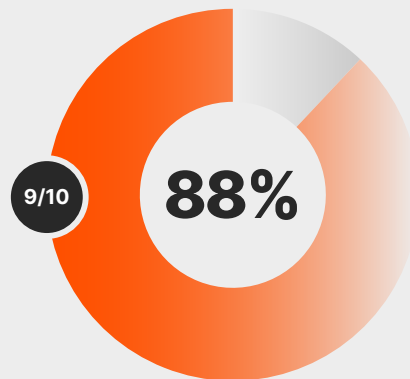
“I currently focus more on managing potential risks such as cyberthreats, technology debts, and data issues. I would prefer to allocate more time to working on innovative projects that can help the business grow.”

CHIEF INFORMATION OFFICER (CIO), CONSUMER SERVICES, UK

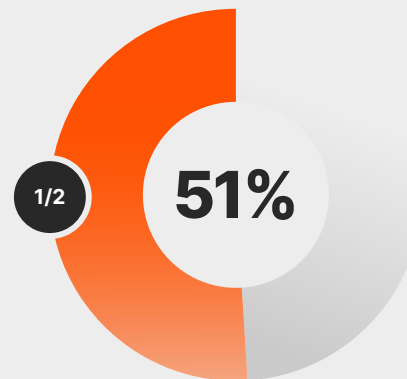
How are IT leaders balancing their risk profile alongside their business-enhancing innovation efforts?

CIOs and IT leaders confirm they are spending too many of their resources on risk mitigation and firefighting, and don't have enough time to focus on innovative technology that will shape their future business success.

How Surveyed CIOs and IT Leaders Responded:



88% say the budget for mitigating cyberthreats is better spent on innovation.



51% of are more focused on keeping on the lights/firefighting than on innovating.

Many CIOs and IT leaders lack time to innovate and instead are continuously firefighting. Surveyed IT leaders predicted the initial use of AI is predominately to optimize existing systems (99% will use it for this purpose). It's clear that they are looking for ways to save time, allowing further exploration and innovation to occur. **After all, innovation breeds innovation.**



03 The AI Revolution

“Artificial intelligence will become indispensable.”

IT DECISION MAKER, IT AND TECHNOLOGY, GERMANY

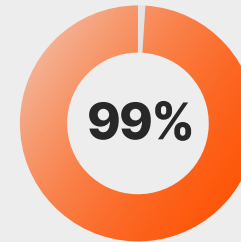
AI will be the primary driver of organizational transformation, but serious concerns remain over the readiness of current infrastructure to support this shift.

An overwhelming 93% of respondents recognize AI as the most substantial opportunity for transforming their organization, **proving AI's role as a driving force for future growth.**

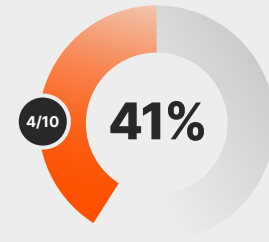
Reflecting this sentiment, almost all (99.7%) organizations are either planning, preparing, or currently adopting AI. Four in ten (41%) are even developing an AI-first strategy where AI is considered for every new use case.

For those who have adopted or are planning to adopt AI tools, the use cases are clear. Improving efficiencies and automating repetitive tasks (55%) are the most common anticipated outcomes, with improvements in the personalization of the customer experience (47%) and the use of customer data for decision making (44%) also expected by many. The reach and scope of AI within modern business will know no bounds.

A Driving Force For Future Growth:



99.7% of organizations are either planning, preparing, or currently adopting AI.



Four in ten (41%) of organizations are even developing an AI-first strategy where AI is considered for every new use case.

Anticipated Outcomes of Adopting AI:²

Improving Efficiencies and Automating Repetitive Tasks	55%
Personalization of the Customer Experience	47%
Customer Data for Decision Making	44%



The Infrastructure of AI

The journey of AI integration will have its own challenges.

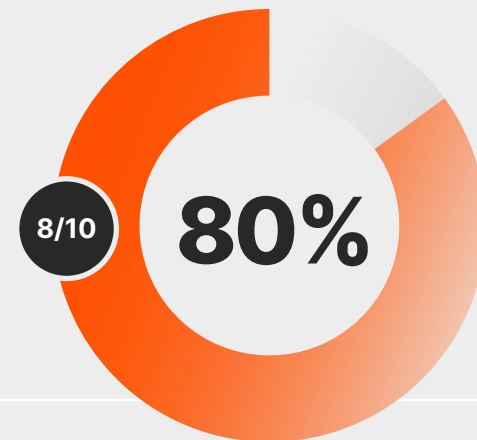
Right now, eight in ten (80%) IT leaders are worried that their business will be left behind if their infrastructure can't support AI fast enough.

This concern may be driving a trend towards leveraging public cloud solutions for AI—a strategy that, while potentially effective in the short term, could be more reactionary than strategic. This raises critical questions about whether these decisions are being made under market pressures rather than through meticulous planning. It is essential for organizations to carefully evaluate their AI infrastructure strategies, potentially seeking expert guidance to ensure they make informed, long-term decisions.

And here's why... With AI in its relative infancy, the **cost of infrastructure** is currently identified as the single biggest cost line associated with AI. It is encouraging that so many CIOs and senior IT leaders recognize the need to improve their infrastructure to best support AI adoption—understanding that, regardless of their current infrastructure mix, investment is needed for greater AI success. But investments in infrastructure improvement must be thoughtful and well considered to avoid near-term ramifications. Highlighting these potential ramifications is the shift in cost concern—anticipated to move to **data management** within the next two years.

The exponential growth of AI and storing the data it produces over the coming years should not be taken lightly. **In fact, over eight in ten (81%) believe that AI-generated data is likely to outgrow their organization's current data centers.**

Worries and Challenges of AI Integration:



Worries

80% of surveyed IT leaders are worried that their business will be left behind if their infrastructure can't support AI fast enough.

Challenges

81% believe that AI-generated data is likely to outgrow their organization's current data centers.



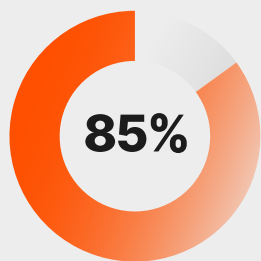


AI Spending Will Shift from Infrastructure to Data Management:

"Which of These Areas Is Currently/Will Be the Single Biggest Cost Line Related to AI in Your Organization's It Department's Budget?"



While it is promising to see that CIOs and IT leaders are aware of the future data challenges they will face, they need to be addressing the question **"How will we handle the additional data management issues?"** right now.



With rising cloud costs causing 85% to re-examine their organization's infrastructure mix already, and with the data generated from AI initiatives only set to increase those cloud costs further, businesses should invest in a data platform that delivers scalability and return on investment (ROI), and that is most importantly, suitable for the longer term.





Summary

CIOs and IT leaders are spending lots of time mitigating risk as the threat landscape continues to expand.

Risk now comes in many forms: cyberthreats, management of disparate systems, technical debt, rising cloud costs, rising energy costs, and more.

The focus required in these areas results in less time and focus for meaningful, impactful innovation. Yet, it's innovation that will set their businesses apart in a near-future where AI and other innovative technologies will be what makes or breaks an organization.

The pressure to put the foot on the gas with AI and other innovation has led some businesses to rush the decision-making process, which will significantly impact them in the long term. Certainly, most worry about whether their infrastructure can support the AI revolution, along with the exponential growth of data that comes with AI. This is a problem they must address sooner rather than later.

The four recommendations here can help to successfully manage the evolving threat landscape while also reaping the measurable benefits of innovation.

[Read Our Ebook for a Detailed Dive Into the Data](#)

Recommendations



01 Understand All the Risks to Your Business Beyond the Obvious Cyberthreats

While some cyberthreats are inevitable, it's vital to secure systems and data with ample preparation. Develop a pre-, during-, and post-attack plan for minimal downtime and impact. Simplify the complexity of your IT estate and reduce technical debt as much as possible. Look for technology vendors that have a simple and unified platform strategy that reduces complexity, delivers continuous improvements, and doesn't require complex upgrades.

02 Address the Rising Cloud and Energy Costs Now

A modern IT infrastructure has become table stakes to power the data-hungry apps and tools that are needed for innovation. This is especially true with recent volatility in energy prices and rising climate change vulnerability. Success now hinges on meeting performance requirements while reducing data center power and footprints. To get there, optimize with a hybrid infrastructure approach, look into as-a-service/cloud operating model options, and invest in technologies that lower overall energy use, power consumption, and physical space.

03 Assess Honestly Your Organization for AI-Readiness

AI is evolving so rapidly that IT is struggling to keep up, much less predict what's next. Companies large and small are realizing that they can be locked into inflexible architectures. A well-designed, efficient, and end-to-end AI infrastructure should offer predictable performance, easy management, reliability, and lower power and space consumption. There are different infrastructure needs for different stages of an AI journey, from training to inference. Investment in a platform that provides optionality for your business to choose the right mix of on-premises and cloud will set you up longer-term with the ascent of AI, as well as optimizing costs and reducing energy usage.

04 Establish a Robust Recovery Plan With Multi-Tiered Resiliency, Immutable and Indelible Snapshots, and Ultra-Fast Data Recovery

Ensure clear leadership roles, prioritize isolated, clean application recovery, and maintain an up-to-date list of application owners. Develop communication plans and regularly test systems to prepare for potential attacks, ensuring confidence that your team can enact a swift and effective response in the event of a real emergency. National Institute of Standards and Technology guidelines are a great place to start.

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