The Innovation *Race*

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

PURESTORAGE®

The Innovation Race

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Content

The Pure Storage Innovation Race survey aims to gauge 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 particular report focuses on the viewpoints from 200 CIOs and other senior IT leaders in the UK, 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 study of 1,500 global C-level (chief information officers, chief technology officers, or equivalent), and decision maker IT respondents in the US EMEA (UK, France, Germany) and APJ (Australia, Japan) Respondents came from organisations 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. This report focuses exclusively on the views shared by UK respondents.

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 favour 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 UK-based CIOs and IT leaders include:

AI

78%

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

88%

Believe that AI-generated **data is likely to outgrow** their organisation's current data centres

RISK

61%

Would personally prefer to **spend more of their time on innovation** (as opposed to risk) but only half think that current business needs require more time spent on innovation

96%

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

UK respondents are the most likely to say that their organisation's data centres aren't equipped to support AI-generated data, identifying this as an area in need of improvement. That said, their conviction about the business case for spending more time on innovation is lacking compared to other markets—a situation exacerbated by their elevated concerns around cybersecurity compared to others.

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Introduction

01   Risky Business

02   The Innovation vs. Risk Management Struggle

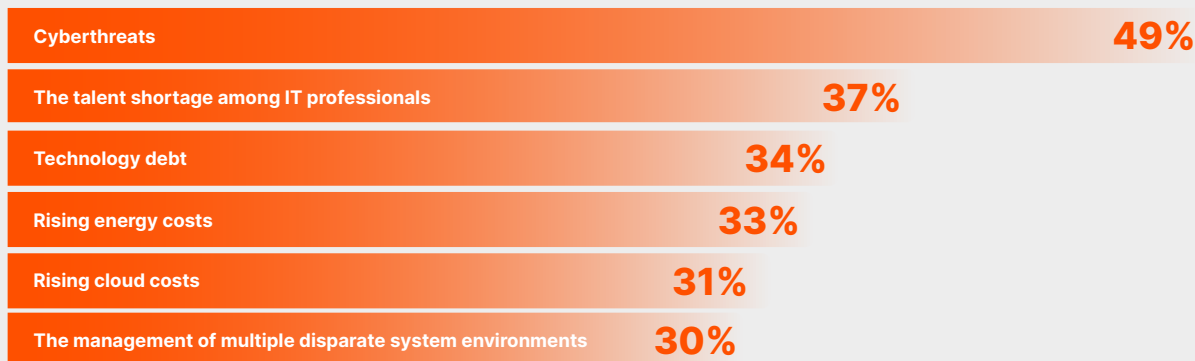03   The AI Revolution

Conclusion

01 Risky Business

> "When Risks [are] recorded, often the escalation of those risks that are out of appetite often go 'into a black hole' and often do not receive the necessary priority to deal with [...resulting] in me spending increasing time attempting to address risks & issues without senior support which takes focus away from innovation."
>
> **IT DECISION MAKER, PUBLIC SECTOR, UK**

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 **87% of surveyed IT leaders place the reduction of their organisation's risk profile as their top priority.**

According to surveyed IT leaders in the UK, the risks having the greatest impact include:[1]

Risk	Percentage
Cyberthreats	49%
The talent shortage among IT professionals	37%
Technology debt	34%
Rising energy costs	33%
Rising cloud costs	31%
The management of multiple disparate system environments	30%

While the threat of cyberattacks is a constant focus across all interviewed countries, it is even more highly acknowledged in the UK as the main threat impacting organisations. However, it is important that the other listed risks which speak to the growing complexity of infrastructure aren't overlooked. 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, the rising cost of running data centres, and shortage of IT professionals, this creates a perfect storm of wasted resources and excessive spending that CIOs must get under control.

1 | IT Leaders were asked to select their top three risks. Percentage figures are the number of respondents who selected that risk.

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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 ITDMs in the UK confirm they are spending too much of their time 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:

87%
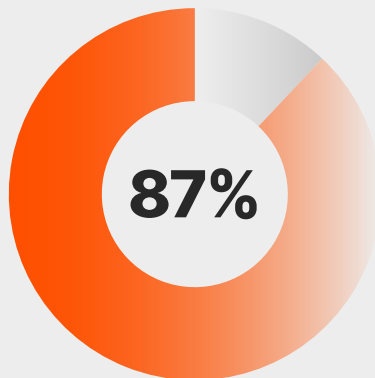
87% say the budget for mitigating cyberthreats is better spent on innovation.

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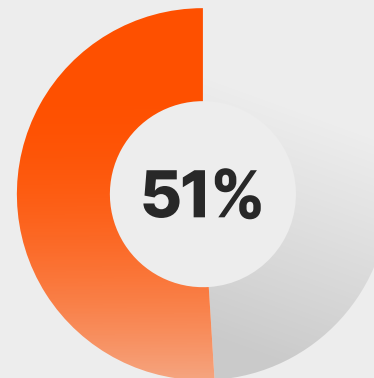
51% of are more focused on keeping on the lights/firefighting than on innovating.

Many CIOs and IT leaders lack time to innovate and instead are continuously firefighting. Even surveyed IT leaders predict that the initial use of AI is predominately to optimise 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.

IT leaders in the UK are less likely to think that their organisation requires them to spend more time on innovation compared to most other markets which might be linked to them having greater concerns around cybersecurity. But they risk falling behind the curve if they fail to acknowledge the importance of having senior leadership driving innovative initiatives.

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03 The AI Revolution

> "AI and cloud technologies can provide organisations with the tools, resources, and capabilities needed to accelerate innovation, improve operational efficiency, and drive business transformation. However, it's essential for organisations to approach technology adoption strategically, considering factors such as data security, regulatory compliance, and ethical considerations."
>
> **IT DECISION MAKER, MEDIA AND ENTERTAINMENT, UK**

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

An overwhelming 91% of respondents recognise AI as the most substantial opportunity for transforming their organisation, **proving AI's role as a driving force for future growth.**

Reflecting this sentiment, almost all (99%) organisations are either planning, preparing, or currently adopting AI. Four in 10 (42%) 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 (53%) are the most common anticipated outcomes, with improvements in the personalisation of the customer experience (49%) and the use of customer data for decision making (45%) also expected by many. The reach and scope of AI within modern business will know no bounds. With this in mind, UK businesses should recognise the need to integrate AI and innovation into strategy, utilise AI to support their efforts in risk management as much as possible, and then harness the free time to innovate further.

A Driving Force For Future Growth:

99%
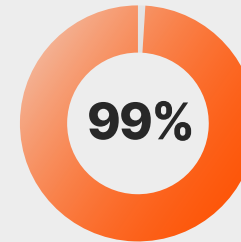
99% of organisations are either planning, preparing, or currently adopting AI.

42%
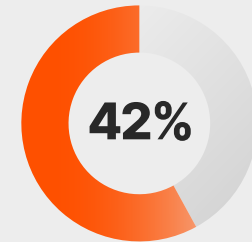
Over four in ten (42%) organisations are even developing an AI-first strategy, where AI is considered for every new use case.

Anticipated Outcomes of Adopting AI:[2]

|	
Improving Efficiencies and Automating Repetitive Tasks	**53%**
Personalisation of the Customer Experience	**49%**
Using customer data for decision making	**45%**

The Infrastructure of AI

However, the journey of AI integration will have its own challenges. Right now, almost eight in 10 IT leaders (78%) 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 organisations to carefully evaluate their AI infrastructure strategies, potentially seeking expert guidance to ensure they make informed, long-term decisions.

Here's why... With AI in its relative infancy, the **cost of infrastructure** is currently identified as the single biggest line item cost associated with AI. It is encouraging that so many CIOs and senior IT leaders recognise 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. IT leaders in the UK are even more mindful of this shift, with 48% citing it as the biggest AI cost in two years' time, compared to the global average of 40%.

The exponential growth of AI and storing the data it produces over the coming years should not be taken lightly. **In fact, almost nine in 10 (88%) believe that AI-generated data is likely to outgrow their organisation's current data centres.**

Worries and Challenges of AI Integration:

78%
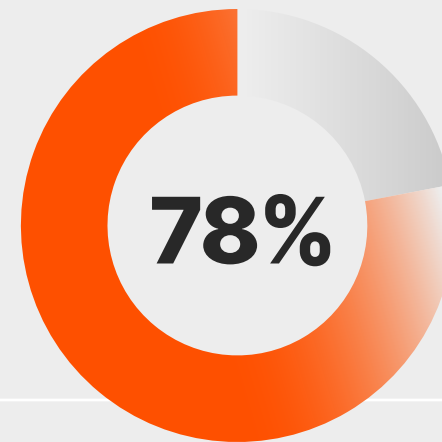
Worries

78% of surveyed IT leaders are worried that their business will be left behind if their infrastructure can't support AI fast enough.

Challenges

88% believe that AI-generated data is likely to outgrow their organisation's current data centres

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 Organisation's IT Department's Budget?"

CURRENTLY

- 36% — Infrastructure costs
- 23% — Attracting and recruiting the required talent
- 22% — Data management due to data growth
- 19% — Initial and ongoing training of staff

2 YEARS FROM NOW

- 40% — Data management due to data growth
- 29% — Infrastructure costs
- 18% — Attracting and recruiting the required talent
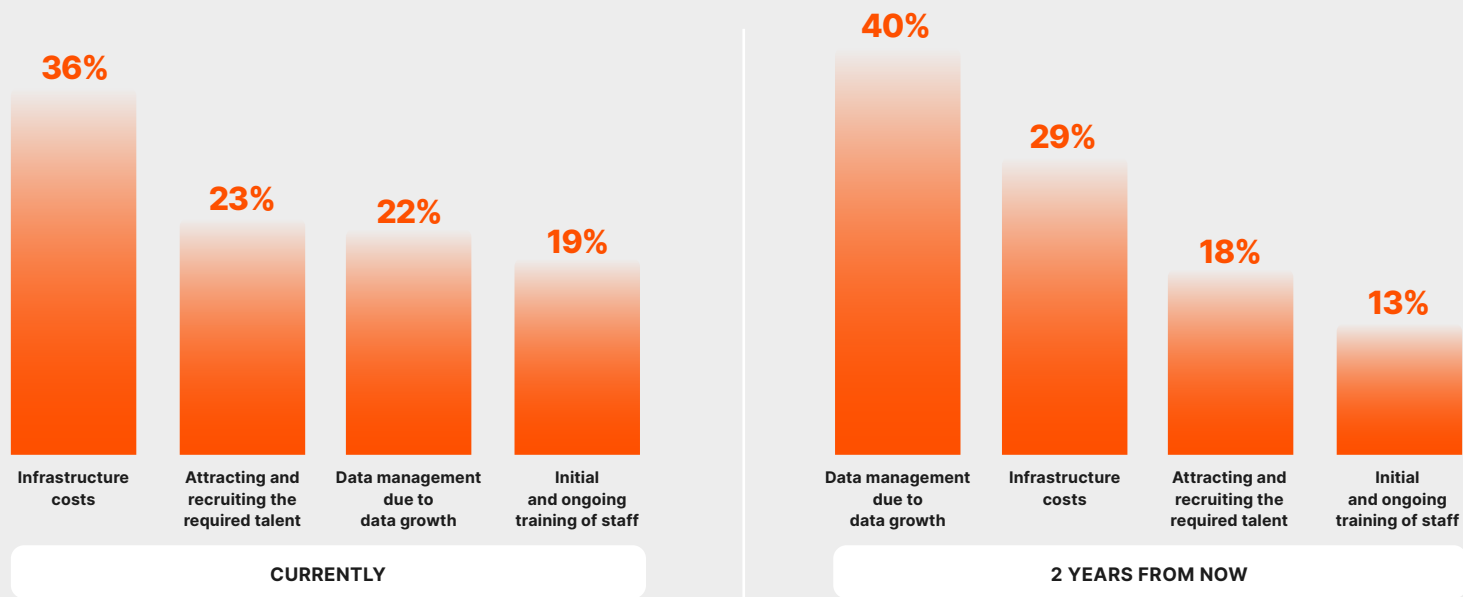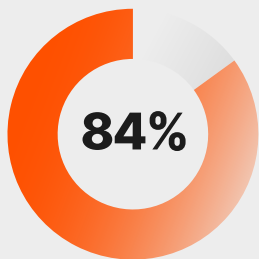- 13% — Initial and ongoing training of staff

Figure X: Which of these areas is currently/will be the single biggest line item related to AI in your organisation's IT department's budget? Asked if respondents' organisation plans to adopt AI [n=197]

84%

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 84% to re-examine their organisation'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.

Conclusion

CIOs and IT leaders in the UK spend a lot 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 make or break an organisation.

The pressure to put the foot on the gas with AI and innovation may have 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, and the exponential growth of data that comes with AI, is a problem they must address sooner rather than later.

▸ **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 centre power and footprints. To get there, optimise 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 Organisation 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 realising 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 optimising 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, prioritise 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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