# The Innovation Race

Reducing Risk and Navigating the Al Frontier for Future Success



# Content

The Pure Storage Innovation Race survey report 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 particular report focuses on the viewpoints from 200 CIOs and other senior IT leaders in Australia, conducted by independent market research agency Vanson Bourne and commissioned by Pure Storage.

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### 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 IT decision maker (ITDM) 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.

Conclusion

## 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 key insights from CIOs and IT leaders in Australia include:

ΑΙ

**82%** 

Are worried that their business will be left behind if their infrastructure can't support AI fast enough 84%

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

## **RISK**

99%

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



Agree that reducing their organisation's risk profile is their top priority

All of this paints the overwhelming picture that businesses and IT departments in Australia are struggling to get started in the innovation race, instead having to focus their time and energy on risk. But just because they are yet to get out of the blocks, doesn't mean that they can't catch up with the right approach.

"In my role, risk management is critical as it helps to guarantee the stability and security of our operations"

CHIEF INFORMATION OFFICER (CIO), RETAIL, AUSTRALIA

## 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 **91% of surveyed IT leaders place the reduction of their organisation's risk profile as their top priority – the highest percentage by geography of the whole study.** 

| According to IT leaders in Australia, the risks having the greatest impact include: <sup>1</sup> | According to IT | leaders in Australia, | , the risks having | the greatest imp | act include:1 |
|--|-----------------|-----------------------|--------------------|------------------|---------------|
|--|-----------------|-----------------------|--------------------|------------------|---------------|

| Cyberthreats   |     | 41% |
|--|-----|-----|
| The management of multiple disparate system environments | 33% |     |
| Technology debt  | 32% |     |
| Rising cloud costs                                       | 29% |     |
| Rising energy costs 24%                                  |     |     |

Australian respondents in particular were also concerned by global power shortages (26%), higher than the aggregate average of 19%. Efforts in renewable energy are strong in Australia, but factors such as extreme weather and the volatile nature of energy imports and exports given today's geopolitical climate may help to explain this difference.

While the threat of cyberattacks is a constant focus, the other listed 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 centres, this creates a perfect storm of wasted resources and excessive spending that CIOs must get under control.

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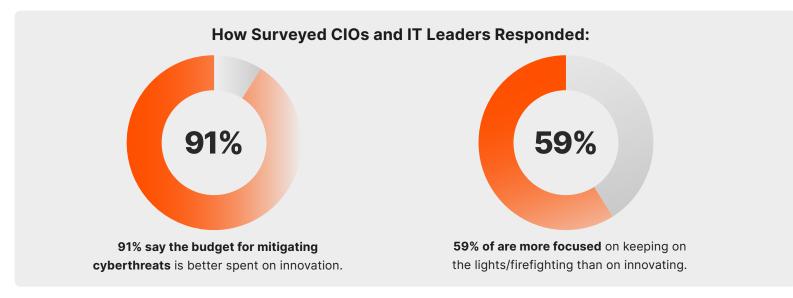
## **02** The Innovation vs. **Risk Management Struggle**

"I want to focus the business on innovation, although risk management is still the most important aspect at the moment."

CHIEF INFORMATION OFFICER (CIO), MANUFACTURING AND PRODUCTION, AUSTRALIA

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

Many CIOs and ITDMs in Australia 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.



Many CIOs and IT leaders lack the time to innovate and instead are continuously firefighting. Australian IT leaders reported the lowest percentages when it comes to personal desire and business need to focus on innovation over risk. Does this mean that they don't see the need to focus on innovation? Can they afford to take their eye off risk management at all? Or is it more complicated than that?

Conclusion

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## **Looking Deeper into the Data**

There seems to be a close relationship between innovation and risk management.

The term innovation can evoke blue-sky thinking of robots and AI, but it seems IT leaders in Australia are viewing it as a problem solve to the huge amount of resources spent on risk management.

All surveyed IT leaders In Australia predicted the initial use of Al is to predominantly optimise existing systems (100% will use it for this purpose). So it's clear that they are looking for ways to save time, streamline risk management and allow further exploration and innovation to occur. **After all, innovation breeds innovation.** 

"[We are] introducing new technology to improve production efficiency"

CHIEF INFORMATION OFFICER (CIO), FINANCIAL SERVICES, AUSTRALIA

"Creating cross-departmental collaboration while innovating projects can better balance risk management" SENIOR ITDM, ENERGY, OIL/GAS AND UTILITIES, AUSTRALIA

"I keep a vigilant eye on the environment and monitor market trends regulatory changes and the technological advancements [that] helps anticipate potential risks and opportunities"

SENIOR ITDM, HEALTHCARE, AUSTRALIA

Conclusion

# **03** The Al Revolution

"We need to constantly innovate in order to meet the needs of our customers and increase their satisfaction"

CHIEF INFORMATION OFFICER (CIO), RETAIL, AUSTRALIA

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

An overwhelming 96% of respondents in Australia 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, all (100%) organisations are either planning, preparing, or currently adopting AI. Four in 10 (39%) 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 (52%) are the most common anticipated outcomes. Other common use cases include: Improvements in the personalisation of the customer experience (43%); and Freeing up more time for innovation and creativity (43%). The reach and scope of AI within modern business will know no bounds but organisations in Australia must get a handle on their use of innovative technology (such as AI) in their day-to-day tasks in order to free up the time and space for even greater, profit-driving innovation. A Driving Force for Future Growth:



100% of organisations are either planning, preparing, or currently adopting Al. Four in ten (39%) of organisations are even developing an Al-first strategy where Al is considered for every new use case.

39%

## Anticipated Outcomes of Adopting Al:<sup>2</sup>

| Improving Efficiencies and Automating Repetitive   | <b>52%</b> |  |
|--|------------|--|
| Personalisation of the Customer Experience         | 43%        |  |
| Freeing up more time for innovation and creativity | 43%        |  |

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## **The Infrastructure of AI**

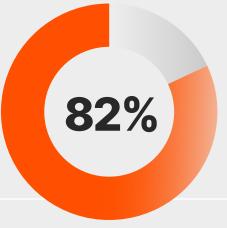
The journey of Al integration will have its own challenges. Right now, 82% of IT leaders in Australia are worried that their business will be left behind if their infrastructure can't support Al fast enough.

This concern may be driving a trend towards leveraging public cloud solutions for Al 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 Al 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 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.

The exponential growth of AI and storing the data it produces over the coming years should not be taken lightly. In fact, 84% believe that AI-generated data is likely to outgrow their organisation's current data centres.

## Worries and Challenges of Al Integration:



## **Worries**

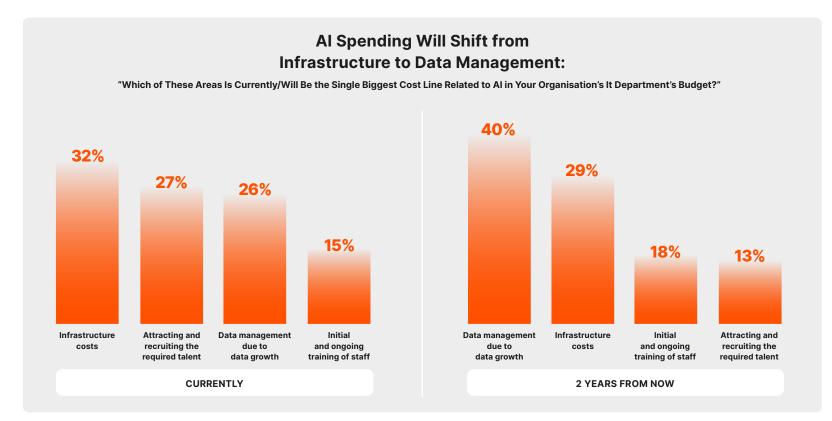
82% of surveyed IT leaders are worried that their business will be left behind if their infrastructure can't support AI fast enough.

## Challenges

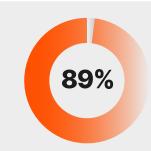
84% believe that AI-generated data is likely to outgrow their organisation's current data centres.

Conclusion

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## Figure X: Which of these areas is currently/ will be the single biggest cost line related to AI in your organisation's IT department's budget? Asked if respondents' organisation plans to adopt AI [200]



While it is promising to see that ClOs 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. Rising cloud costs are causing 89% 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.

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# Conclusion

## CIOs and IT leaders in Australia 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 be what makes or breaks 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

Al 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-toend Al infrastructure should offer predictable performance, easy management, reliability, and lower power and space consumption. There are different infrastructure needs for different stages of an Al journey, from training to inference. Investment in a platform that provides optionality for your business to choose the right mix of onpremises and cloud will set you up longer-term with the ascent of Al, 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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