Gold Microsoft Partner | Azure Expert MSP

Data#3

TAKING IT TO THE NEXT LEVEL WITH MICROSOFT AZURE –

THE 5 STAGE PATHWAY TO CLOUD SUCCESS

Discover how Data#3's comprehensive suite of Azure services can help you hit the mark, no matter where you are in your Azure journey.

CONTENTS

I'd like you to help me to…

”

We were particularly impressed with Data#3's upfront discovery and planning work. This ensured they fully understood our challenges and where we needed to be with our technology platform. Without doubt, this meticulous discovery and planning phase was critical to the overall success of the project budget.

Andrew Ferrarese, Manager Information Services, VIC SES

Read the full case study

Microsoft Azure is the fastest growing public cloud.[1]

And for good reason. The Azure cloud platform promises cost savings, security, flexibility and scalability. Compared to on-premises predecessors, it's much faster and more resilient. Plus, with access to Azure's almost unlimited computing power, the very largest enterprises through to small businesses can enjoy increased productivity.

However, these benefits are only realised when Azure is done right. Too often, organisations fall short on their Azure implementation – leading to cost blowouts, inefficiencies or issues with their security. Indeed, having completed hundreds of Azure health checks within Australian businesses that are up and running with cloud, very few organisations had a clean bill of health.

Implementing Azure can seem simple, and in some cases it can be. However, in most cases, deploying Azure does take careful planning. To reap true benefit from Azure, you need to lay the right foundations and secure ongoing support.

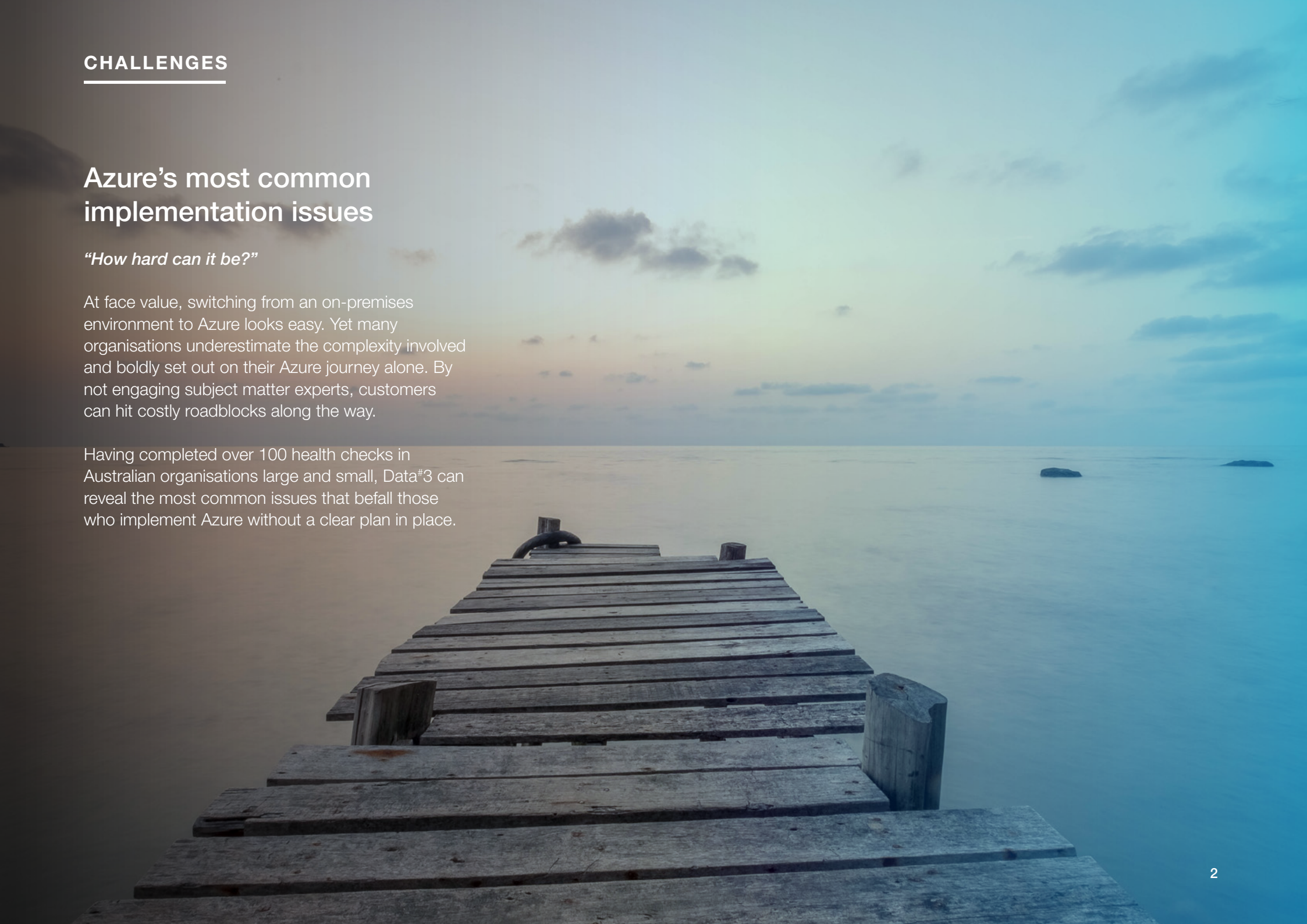
Strategic differentiation no longer lies in whether you use cloud but rather in how you use it and manage it.[2]

Azure's most common implementation issues

"How hard can it be?"

At face value, switching from an on-premises environment to Azure looks easy. Yet many organisations underestimate the complexity involved and boldly set out on their Azure journey alone. By not engaging subject matter experts, customers can hit costly roadblocks along the way.

Having completed over 100 health checks in Australian organisations large and small, Data#3 can reveal the most common issues that befall those who implement Azure without a clear plan in place.



CHALLENGES AZURE'S MOST COMMON IMPLEMENTATION ISSUES

Lack of governance

Governance is absolutely critical to your Azure implementation. Without it, your stakeholders don't have a clear path to follow. There's no plan of action.

Many organisations make the mistake of thinking that existing procedures, systems and operating models can apply to cloud. Not true. You can't simply lift-and-shift an on-premises environment to the cloud – nor can you replicate old governance models in the new environment. As well as a new architecture, you need to re-evaluate everything from your internal skill sets to your compliance and reporting obligations.

A Forrester survey found that almost half (49%) of enterprises don't have a formal cloud operations plan; and exactly half lack an active knowledge base of cloud best practices[2].

Cloud allows ICT to be delivered as a service, which means the services are owned by someone else and provisioned somewhere else. To be successful in cloud, you need a new plan that takes into account cloud best practices. Your governance model should focus on establishing accountability, understanding compliance and reporting obligations, defining decision rights, and balancing benefit, risk and resources.

Cost blow-outs

Time and again, organisations pay too much for Azure. As our health checks reveal, a staggering 75% of customers are paying too much for Azure – some by as much as 70%. Yes, that's paying $70,000 more than you should be on a $100,000 bill per month!

What are the biggest issues that Data#3 find through our Health Checks from a cost perspective? First, not using Reserved Instances (RIs). That is, they are committing to a specific type of virtual infrastructure profile rather than using a PAYG model and varying the workload size according to needs. The second is not using the Azure Hybrid Use Benefit (AHUB).

How badly can you get it wrong? In one instance, a customer burned through $2.5 million in Azure consumption in two days while using a preview feature in Azure due to a lack of governance and release management processes.

Most often, these cost blow-outs stem from a lack of good governance. Without the right financial management plans in place, and without strategies for reporting on Azure expenditure, costs will inevitably skyrocket.

You need rock-solid ways to monitor, manage, estimate and reconcile your Azure costs so that you can keep them in check. For a deep-dive into cost optimisation of Azure, ***read this white paper.***

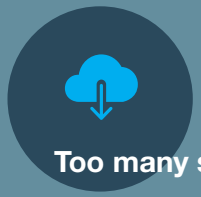
Exposure to security breaches

Through our health checks, we see customers who unwittingly expose themselves to security breaches, privacy abuses and other potential security incidents. For example, one customer gave open access to a domain controller over the internet – fortunately, they worked with Data#3 so the issue was detected early and no implications or issues arose.

Another customer found that they had credentials for sale on the dark web. Their system had notified them of the issue, but they didn't investigate initially. Then, they discovered active logins from many suspicious locations to their systems. Further forensics showed that the hackers were sending fake invoices on the company's behalf. Again, thankfully the Data#3 team worked with the customer to resecure their environment and close the breach.

While Azure is renowned for its tight security, it is ultimately your responsibility to ensure that you have the right level of protection for your data. Make sure you have the basics in place now, with this ***blog on the 4 Azure security features you must know about.***

CHALLENGES AZURE'S MOST COMMON IMPLEMENTATION ISSUES



Too many subscriptions

How many subscriptions do you really need? Too often, we see customers setting up far too many subscriptions. In one example, an organisation had over 80 Azure subscriptions, contributing to a massive management and operational overhead. It is virtually impossible to report on usage and consumption across that many subscriptions. At the heart of this issue is an incorrect set of assumptions about how Azure should be architected.

It's important to remember that it is much easier and far less costly to start out right with the correct Azure framework – compared to going back and trying to deconstruct a problem that has already been implemented. For more on our recommendations about Azure subscription structure, see page 7 *in this white paper*.

Lack of availability

Putting all your eggs in one basket – or, in Azure's case, in just one data centre – will impact upon availability. Some Azure customers only use one data centre, creating a single point of failure.

Azure, by its nature, is set up to maximise availability and business continuity – to not make the most of its resilient environment is a wasted opportunity. Your Azure should be architected into different zones to build the highest availability into your BCDR strategy.

Pace of change

Azure and cloud computing are evolving day by day. To keep up with the pace of change, you need a highly dedicated resource in-house to stay abreast of what's new. This can be hard; many organisations struggle to nurture and develop the requisite skills in-house to truly leverage the benefits of Azure, or to provide a dedicated resource to this part of their ICT estate. Leveraging external expertise is a great way to alleviate this ongoing challenge.

To maximise your investment in Azure, seek help from Azure experts – the people who live and breathe Azure; the people who monitor the latest changes and know what's relevant to your business.

Scott Gosling, National Practice Manager – Cloud, Data#3

How a Data#3 health check uncovered $40K per month in savings

An example:

A Data#3 customer was paying $100,000 per month for Azure, and was seriously considering moving to another cloud provider due to cost.

Data#3 performed a health check and found that their compute and storage costs were even. This is unusual – for most customers, the typical ratio of compute to storage is three to one. Closer analysis revealed that their VMs were allocated within a dedicated premium disk for windows and Linux, and they were not using the free disk that Azure supplies for this purpose.

In short, they were using 1990s methodology for a modern environment. We recommended reconfiguring their VMs and using the free disk that Azure provides. By removing the extra premium disks that they no longer needed, we helped them realise savings of more than $40,000 per month.

Azure best practices

These 8 best practices will help you extract the most value from your Azure investment, save your business money and boost performance. For an in-depth review and practical tips to implement these best practices, ***download this white paper.***

Protect your investment in Azure

1. Your controls and policy should follow the data to the cloud

Only 22% of customers that Data#3 delivered Health Checks for had Azure Security Centre enabled. We strongly recommend all customers enable this feature and suggest that they upgrade their Azure Security Centre from the basic (free) version to the paid version. This unlocks rich security features at minimal cost, and covers both hybrid and Azure resources (the free version only covers Azure resources).

2. Staying available extends to the cloud

A business continuity strategy is vital to organisational resilience. While Microsoft provides a fantastic set of tools for security and high availability, the configuration and management is your responsibility. Don't fall into the trap of thinking that Azure does absolutely everything. A recent survey found that 69% of customers incorrectly assume that their cloud provider is responsible for backing up their workloads.[3] Learn more about data protection and Azure Backup in ***this video*.**

Right-size your investment in Azure

3. Hand to glove, your Azure instance should be that perfect fit

Azure is not one-size-fits-all. And so it shouldn't be. One of its best features is the ability to easily scale up or down depending on your current needs. Use ***Azure Advisor*** – a free, yet often underutilised tool – to scan your environment and resources, and make recommendations around availability, performance, security and cost. Don't forget about Azure's autoscaling engine, either, which can inject elasticity and agility into your infrastructure.

4. Your Azure subscriptions should align to your organisational structure

Save money by setting up your Azure subscriptions correctly. Azure Scaffold is a useful tool to use here. It protects the business from human error and avoids costly mistakes down the track. Used as a governance tool, it sets up naming conventions, policies and rules to make sure that a subscription is not open to vulnerabilities.

5. With subscriptions streamlined, it's time to start tagging your Azure resources

Use tagging to identify and organise your resources in Azure so you can find what you need, fast. Further, tagging helps you report on resources accurately – it's a powerful cost-management tool. Nearly every resource type within Azure can be tagged and a per-subscription policy can be employed to enforce tagging. Multiple tags can also be used for individual resources therefore increasing reporting granularity. For more on right-sizing your workloads including using tagging, ***see this video***.

6. Save on storage – over-spending is a common mistake

Choosing the right style of storage for your workload and then right-sizing that storage for your needs is a simple way to save. Azure offers a range of durable, highly available and massively scalable storage solutions: file, disk, blob, ***data lake storage*** and archive. Use Azure Monitor and Azure Advisor to track storage, set alerts and take proactive action.

7. Your virtual machines should have the weekend off too

A great way to cut costs with Azure is to shut down machines that aren't mission critical across the weekend or after hours. While you're at it, suspend any dormant virtual machines. Azure Monitor and Azure Advisor are useful here, tracking in-out traffic, CPU usage and more to provide useful reports on dormant machines and help you identify those that could be switched off. Discover further tips for selecting and optimising your virtual machines ***in this video***.

Get the best deal on your investment in Azure

8. If you were offered a big discount, you'd take it, right?

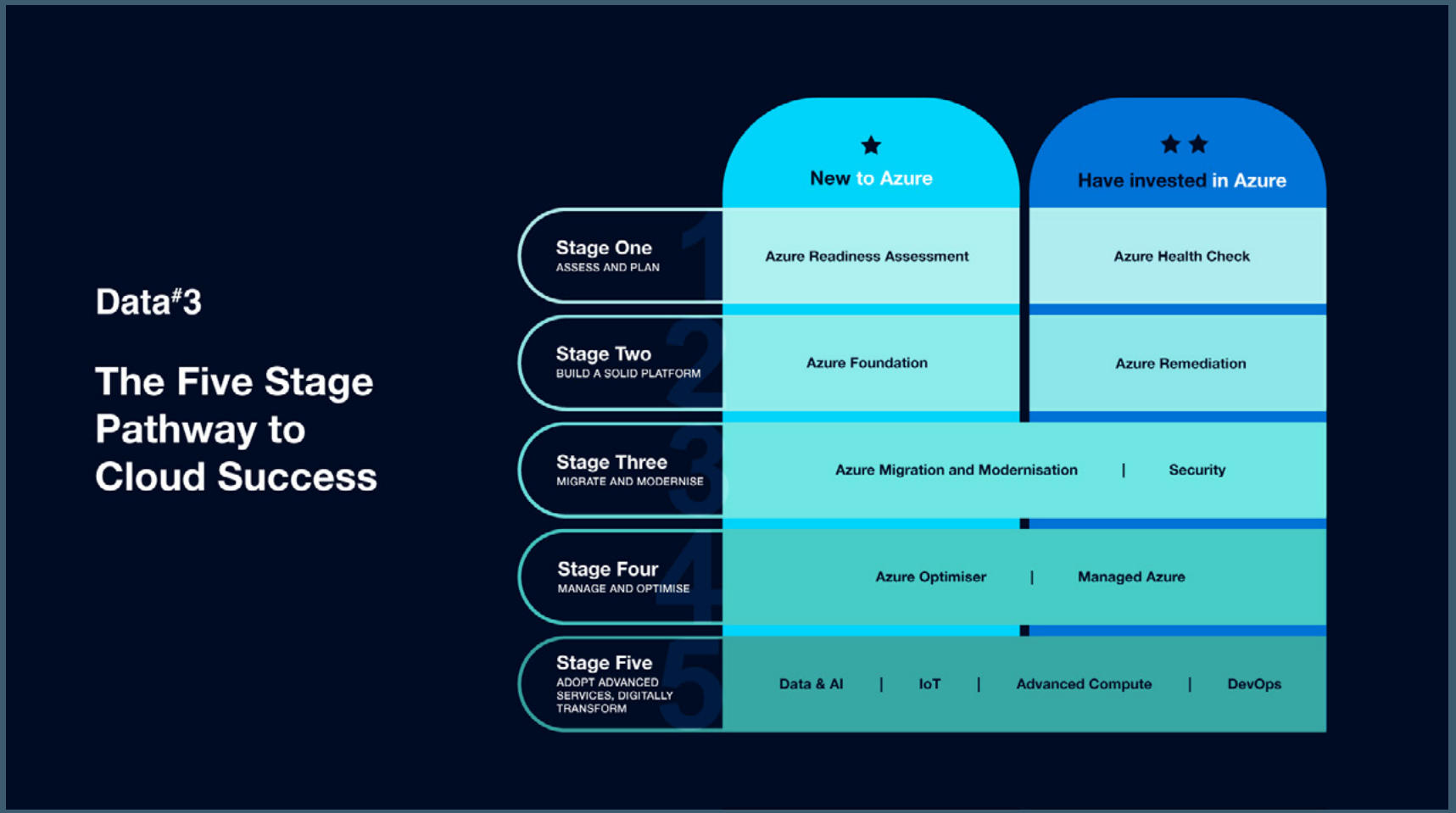
There are a number of ways that you can save with Azure.
To make sure that you are not overpaying and that your Azure licenses are correctly structured for your needs, lean on an expert partner like Data#3. We can show you how to save up to 82% with Azure Hybrid Benefit and Azure Reserved Instances.

Read the ***8 best practices for cost optimisation in Microsoft Azure*** white paper for other ways to save.

The 5 stage pathway to cloud success

Whether you are new to Azure or looking for advanced Azure services to take your business to the next level, Data#3 can help. We are proudly part of the Azure Elite program with Microsoft's Azure engineering team, and have the deep expertise your business needs to maximise its investment in Azure.

The five stages outlined are premised on Azure best practices. You can come in at any stage.



THE DATA#3 MICROSOFT AZURE METHODOLOGY

Stage 1: Assess and Plan

Azure Health Check —
Performed by our Azure specialists, an Azure Health Check evaluates the current state of your Azure environment and recommends best practice actions to optimise it.

The in-depth assessment reviews both infrastructure and operational practices using data collection tools provided by Microsoft. From this assessment, we identify any critical issues, areas for optimisation and situations where your cloud environment deviates from best practice. Finally, we provide customised recommendations on how to optimise costs, improve governance and mitigate security risks.

Learn more

Azure Readiness Assessment —
The Azure Readiness Assessment service will help you improve your cloud strategy and roadmap without proving a burden on your staff. A Readiness Assessment helps you reduce uncertainty, and supports planning and roll out. The Azure Readiness service includes a discovery phase, analysis of which workloads will run in Azure, cost comparisons and a high-level migration plan to move on-premises workloads to Azure.

Stage 2: Build a solid platform

Azure Remediation —
If you are live in Azure, have had a Health Check delivered and have had issues identified in your Azure implementation, Data#3's Azure Remediation service will rectify any issues.

Think of this step as an opportunity to relay the foundations of your cloud strategy – incorporating best practice connectivity, identity, security, continuity and governance – to create an optimised environment. With this step completed, your organisation will be in a strong position to start realising the true benefits of Azure.

Azure Foundation —
If you have not gone live in Azure, Azure Foundation will set up your governance and controls, taking care of connectivity, identity, security and continuity. Data#3 will determine your organisation's specific level of cloud readiness and create an informed, evidence-based, overarching cloud strategy and staged roadmap that's fully tailored to your cloud needs and ambitions.

Learn more in this white paper

Stage 3: Migrate workloads

Azure Migration and Modernisation —
With optimised foundations laid, you're ready to migrate workloads to Azure. But you don't have to go it alone.

Data#3's Azure specialists will ensure that you're moving the right workloads at the right time – and in the right order – with an eye on modernising your workloads simultaneously. We will show you why the 'lift and shift' approach doesn't always work, and present solutions that unlock the real benefits of the cloud. This way, in the near future, you can start doing things with Azure that may not even be in your roadmap yet (see Stage 4).

Data#3 uses leading methodologies and proven processes to deliver faster, consistent and predictable migrations for customers transitioning to Azure. With many years of experience with other customers and unparalleled expertise as a Microsoft Gold Cloud Platform (Azure), Azure Elite partner and Windows Server & SQL Server Azure Migration Advanced specialisation partner, we're here to ensure you don't make any mistakes with cloud.

THE DATA#3 MICROSOFT AZURE METHODOLOGY

Azure Security —
Azure Sentinel is a SIEM solution that incorporates artificial intelligence and automated response to respond to threats. It can take a wide range of signals from on-premises and cloud solutions. Azure Sentinel can take inputs from M365 E3 or E5, extending this investment into a single, integrated console.

Adopting cloud requires an integrated on-premises and cloud security posture management and view. The Azure Sentinel SIEM service can assist in helping customers protect their cloud and on-premises estate through the use of an SIEM solution that can take an array of inputs across users, devices, applications and infrastructure. Azure Sentinel can also reduce the instance of false positives by up to 90%, and employs automated response for incident response.

Learn more in this white paper

Stage 4: Manage and Optimise

Azure Optimiser —
Azure Optimiser is an all-in-one solution to help you manage the complexities of Azure, optimise your usage, support your business continuity and prevent unnecessary overspend. The solution provides comprehensive reporting, resource scheduling, security and health reporting.

Managed Azure —
The Managed Azure Service provides access to the Azure Optimiser Service, and also includes:

- Support and Service Desk – 24x7 Critical Incident support
- Monitoring and Alerting – Continued monitoring by Data#3's Event Management team
- Storage, Backup and Disaster Recovery – Ensuring capacity, backup, test restores and managed DR
- Azure Network Management – Supporting connectivity to Azure, including firewall & ExpressRoute
- Tenancy and IaaS Management – Subscription and tenancy management
- Security and Identity Management – Including MFA, Azure Active Directory, VPN, and Certificate Management

View Infographic

Azure Enterprise Management —
In addition to the above, the Managed Services offering includes:

- Network admin / support / management
- ExpressRoute
- Azure network appliances
- Office 365 (SharePoint, Exchange, etc.)
- Log analytics
- Application insights
- Security Incident Event Management (SIEM)
- Security operations

Stage 5: Adopt advanced services, digitally transform

Once you've moved workloads into Azure, it's time to start thinking beyond just virtual machines. How can the cloud platform deliver measurable benefits and a competitive advantage to your business? Our Azure specialists can help you identify the Azure services that will positively impact your bottom line, and help you with implementation and ongoing support.

Watch Deep Dive Videos

DevOps —
Deliver innovation faster with simple, reliable tools for continuous delivery.

Learn More

Data & AI —
Leverage a comprehensive set of solutions to turn your data into actionable insights.

Learn More

Advanced Compute —
Manage and administer Kubernetes, virtual desktops and IoT connected devices.

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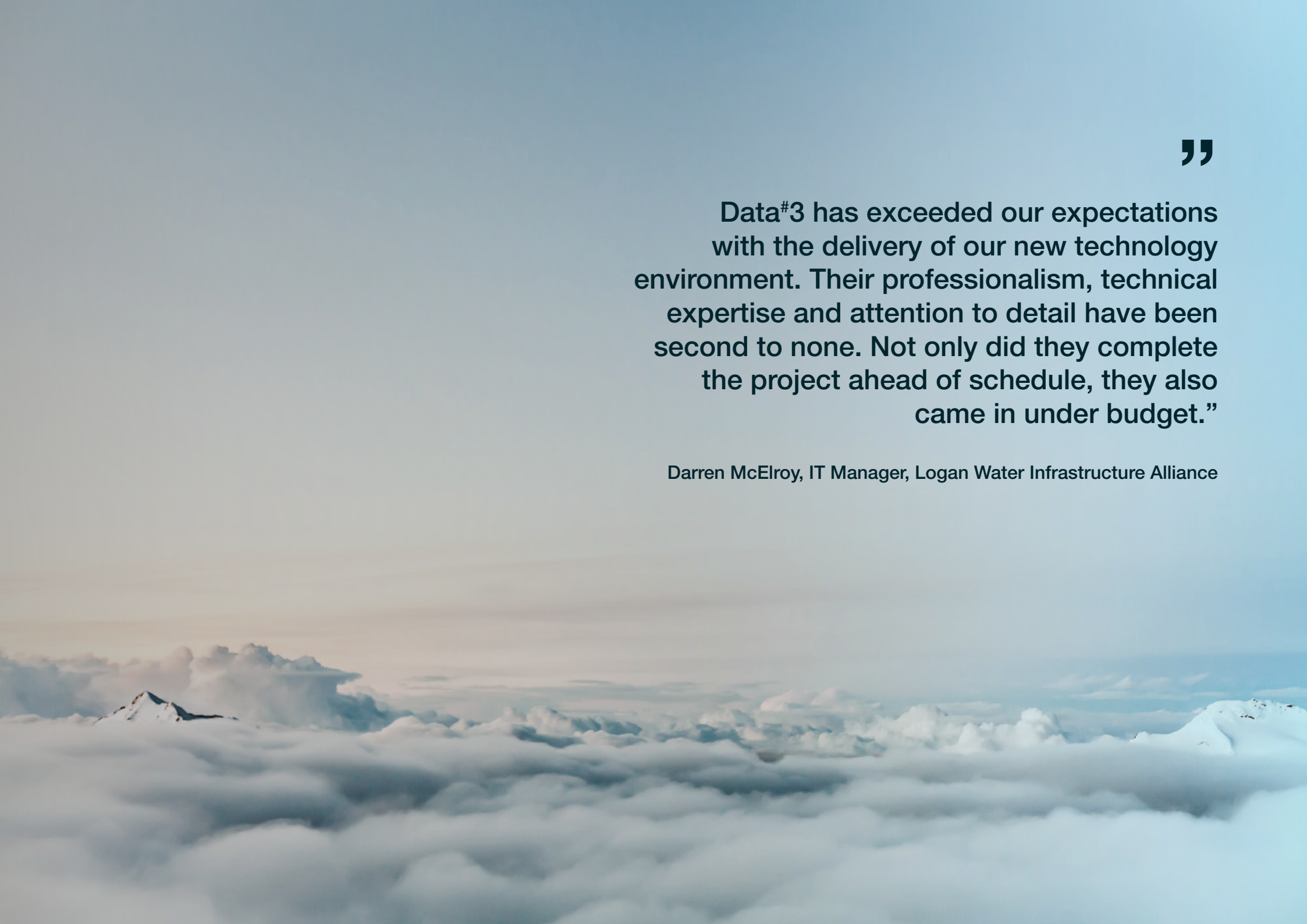
Internet of Things —
Bring IoT to any device and any platform, without changing your infrastructure.

Learn More

View Azure Video Centre



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Data#3 has exceeded our expectations with the delivery of our new technology environment. Their professionalism, technical expertise and attention to detail have been second to none. Not only did they complete the project ahead of schedule, they also came in under budget.”

Darren McElroy, IT Manager, Logan Water Infrastructure Alliance

Data#3

Data#3 is Microsoft's largest Australian partner, and has unparalleled competencies in Azure, licencing, system integration and managed services. As a Microsoft Gold Cloud Platform (Azure) partner, our Cloud Migration Framework has been proven to successfully guide and support customers throughout their end-to-end Azure journey – from understanding and planning, to operating and optimising. Data#3 has also been ***selected by Microsoft to provide Azure Migration services as part of Microsoft's Modernisation Factory*** in AU Central.

Already using Azure? Book an Azure health check to uncover areas for improvement.
Book a health check or consultation.

New to Azure? Engage Data#3 for a test drive or consultation for an optimal head start.
Book a test drive or consultation.

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Sources
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