

Whitepaper:

How to manage and optimise cloud costs



'Move to the cloud' is the cry!

And more than 81% of Australian businesses with 200+ staff have done just that, according to the Australian Bureau of Statistics.

Moving your IT services to the cloud can assist with:

- realise capital savings
- manage operational budgets
- access enterprise-level technology for speed, security and scalability.

However, the key to gaining the full benefits of your migration is through optimising your cloud environment.

Managing and optimising cloud costs is fast becoming an area of specialist knowledge. Optimising is a bundle of financial, technical, service and logistical processes that go beyond any one traditional business department. Indeed, 'Centres of Excellence' or 'FinOps' teams are becoming essential for enterprise level businesses to maximise the benefits of cloud services.

Achieving the cost benefits over time is a function of the pricing models you choose, how these are managed, and how your operators use cloud services. If this is not possible in-house, managed IT service providers often include cloud optimisation as part of their offerings.

If you know you're not a specialist in cloud optimisation, we've put together this plain English, cut-to-the-chase guide to cloud management.

We examine why it's so important to take action now. We also suggest solutions for effective cloud utilisation without wasting money.

In this guide you'll learn how to:

- Be aware of strategies to help optimise use and cost of cloud services
- Be mindful of pitfalls that may actually increase costs
- Deploy resources to help manage cloud optimisation
- Leverage your internal and external resources to help achieve best outcomes
- Help make the most of service tools you're already paying for

What is cloud optimisation?

The fundamental meaning of cloud optimisation is making very sure that your investment into the world of cloud 'as-a-service' represents real value for money, while making the best use of your technology and people.

It encompasses all aspects of IT services, including the human interface. Providers offer hundreds of models, pricing options, conditional discounts and customisations that make each deployment unique. It's complex. But it can be managed. If well-executed, it can realise significant bottom line savings.

Another way to understand the concept is the well-known phrase 'cost-benefit' analysis. Now add the 'instant' paradigm – cloud optimisation is an hourly, ever-changing activity. The annual budget spreadsheet is not going to do the job.

Two things make optimisation important: Cost and performance.

Managing financial risk is a core business function. So, ignoring IT services cost centres is not best practice. Running a lean cloud environment, whether you're running hybrid, all-public or all-private cloud, is important, but it shouldn't cut down the level of speed, scalability or processing power.

Cloud providers like Microsoft Azure or Alibaba Cloud offer comprehensive suites of tools and options for optimisation. It's to their advantage (as well as yours) not to have idle or under-used resources. In the US alone, for example, it's estimated US\$26 billion was wasted in 2021 in oversized, idle or orphaned cloud resources.

The cloud ecosystem grows more convoluted every day. Any business entering it encounters a bewildering array of products, services and technology. Navigating your way and maintaining confidence that you're investing in the right services at the right time is tricky, to say the least.

At the same time, it's important that your IT is performing optimally to maintain business growth and competitiveness.

As well as paying for cloud services, end users are another potential 'leak' in IT spending. How your staff utilise cloud time, apps and your IT resources can significantly alter your bottom line.



Ready to optimise your cloud resources and costs?

Firstly, assemble your in-house FinOps team with technical, management and financial staff. Your managed service provider can also provide valuable input, or manage cloud optimisation end to end as part of their IT support services.

With this team, we're going to conduct a 360o review of all facets of operations to gain a complete picture of your cloud environment.

Before you start optimising, review the playing field...



Strategy

Does your Technology Plan encompass cloud optimisation along with your cloud strategy? Does your Financial Plan include pricing models that lower the cost of cloud services?



Software and app services

Can you identify usage patterns, and do you have capacity for growth?



Licensing

Are your staff using the licences and subscription assigned to them? Do the policies need updating to bring balance in this area? Can you consolidate licencing agreements?



Infrastructure

Do you have just the storage you need or are you overprovisioned? Are there frameworks in place to shut down idle resources?



Sustainability culture

Encouraging practices that raise awareness of cloud spending should become part of the culture that addresses environmental responsibility and sustainability – for example, turning off lights and air conditioners and sharing space.

The ongoing process of cloud optimisation



(1) Assess and identify

Assessing your current and future cloud resources and requirements, identifying cloud spending trends and cost-saving opportunities.



(2) Optimise

Consolidating your cloud environment, identifying cloud resources that can be merged, restructured or deactivated. Creating greater efficiency and uncovering cost savings.



(3) Manage

Continuous monitoring and reviewing your cloud environment and resources to optimise your environment. This not only ensures increased efficiency but also helps improve your return on investment.

Step 1: Assess and identify

This step is all about ensuring you have the right cloud foundations to reach your goals. If you're not sure what you need, your managed service provider can help. CodeBlue can also provide a Technology Plan in this step of the process.

Focus on how you're using resources, both now and into the future.

- **Review your current cloud resources**
Identify the type and amount of cloud services to support your business goals and future growth. Microsoft's Azure service, for example, offers guidance through the Well-Architected Framework to illuminate understanding of your computing options. It allows you to compare hosting models, service limits, cost, SLA, regional availability and more.
- **Are there any cloud resources missing or possibly resources that are not fit for purpose?**
If you're looking for a tool to assist with this, [Microsoft's Azure Advisor](#) helps to find and shut down unused cloud resources. Rationalising will

bring RAM, CPU and network activity into line with your operations and end users. Rightsizing is also important for your [Reserved Instances](#) – maintaining capacity for the applications that are used 24/7.

- **Understand and forecast your costs**

Monitor and review your billing. Cloud services can run into hundreds of line items so there's a good possibility that some costs slip through the net. Our cloud experts can help to sift through and identify where savings can be made.

- **Managing costs separately for variable and predictable workloads will allow you to forecast and allocate budgets more effectively.**

For example, it's quite common for 'orphaned' resources to remain active once a particular project is complete and the team no longer needs bespoke IT development resources.

To assist, the Azure Cost Management and Billing tool monitors and analyses billing. Giving graphic, easy to use metrics and reporting for real-time decision-making.

If using Azure, use the pricing calculator and total cost of ownership calculator for cost estimates, analysis and building a business case. Azure also has [financial and technical guides](#) and training you can leverage.

Our managed IT experts know how to make the most of platform tools like Azure. Call today to discuss how we can help you.

Step 2: Optimise

This step comprises the ongoing actions of your FinOps or Centre of Excellence team.

It's continual examination of usage patterns, in-depth analysis of all financial obligations regarding cloud services, and taking immediate appropriate actions to improve or rectify operations.

Look for efficiencies, opportunities and roadblocks.

There's plenty of questions you can ask when it comes to making the most of your cloud resources:

- **Identify any cloud consolidation and resizing opportunities**

- Do you have multiple applications for the same purpose that could be consolidated?
- Is there one platform or application that would better serve future needs?
- Can you divert usage to one over the other?
- Could you modify the size of any computing services?
- Could you consolidate subscriptions or agreements?

- **Identifying unused and under-utilised cloud resources**

- Could any of these be deactivated?
- Are there any storage options that should have been terminated?
- If under-utilised, could you divert usage to another application or platform and close it?

- **Review your workload architecture**

- Could you invest in reserved instances?
- Could you move on-premise to the cloud or more to a hybrid model?
- Should you move from a multi-cloud to single cloud model?
- Could you configure autoscaling and auto shut-down to help with consumption efficiency?
- Can you restructure your architecture workloads so they can work more effectively? If you're unsure, your managed service provider can provide recommendations for [the right mix of compute options and services](#).
- Could an 'as a service' model be better suited and more cost effective to your operations?
- Do you have the right storage and sizing solution for your usage?

Your managed IT provider can help you [review your structure and provide guidance](#) on the most efficient and effective structure for your business.

Not sure you have the right answers for these questions? Or perhaps you have further questions. Our team can help.

Step 3: Manage and improve

Once your team is established with a clear mandate to optimise the company's investment in cloud computing, provide oversight and guidance to **ensure best practice and optimal efficiency is achieving the results you expect.**

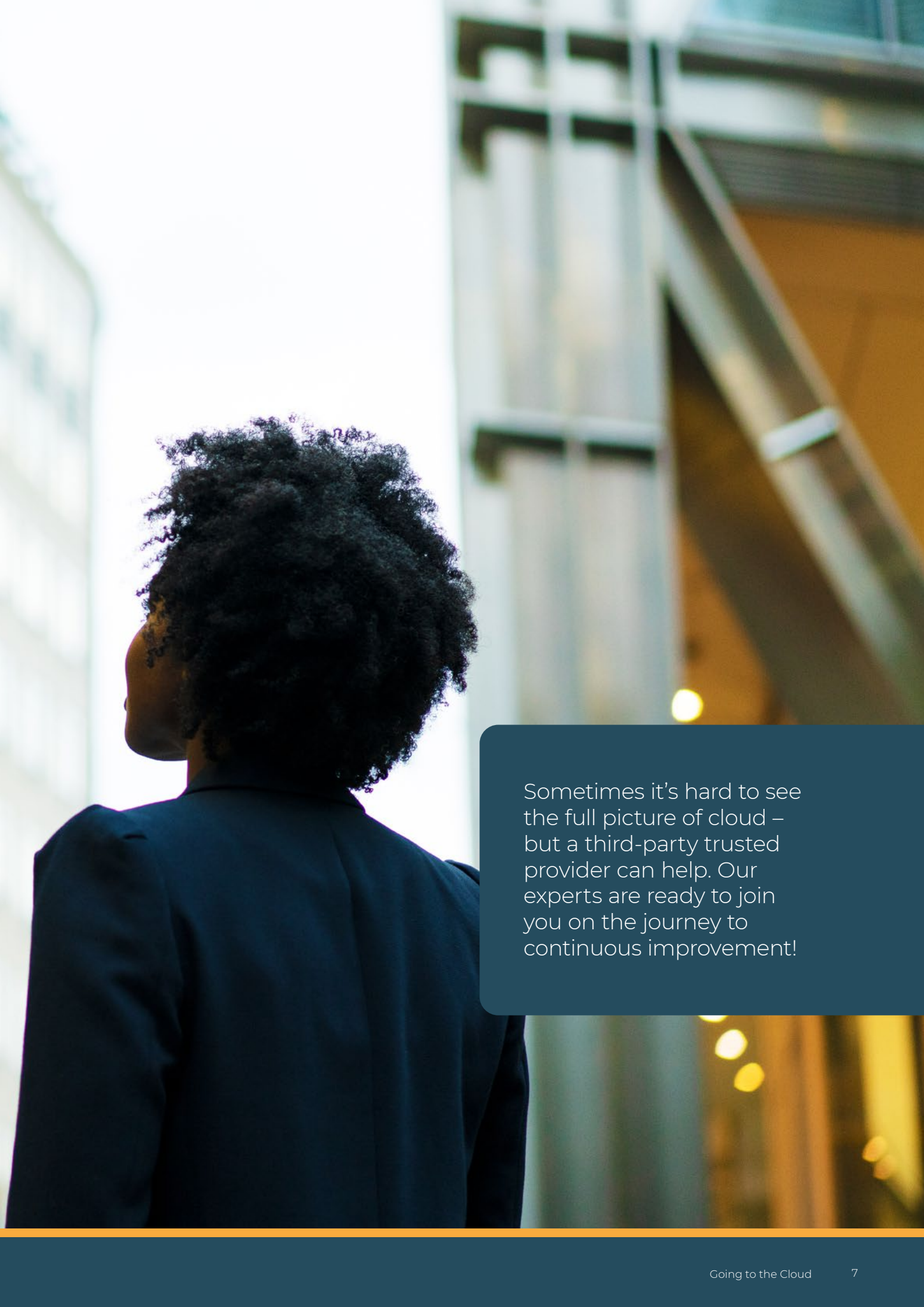
Cloud optimisation is a process, and continuous improvement is key to ensure it evolves with you.

Ongoing tips for your cloud environment

- A full review of FinOps activity should be undertaken at least annually in line with your technology planning and business strategy.
- Standardised processes and in-built audit procedures can ensure you keep your cloud structure in good health, with decreased vulnerabilities.
- Review your cloud requirements in line with your IT strategy and technology plan at least annually, ensuring you have the right cloud mix to meet your objectives and goals. This can also help you uncover additional cost savings.

A cloud optimisation plan should never be stagnant. While you've got strategy included in your Technology Plan now, the four key things to manage and improve on an ongoing basis are all part of the 'playing field' that we reviewed right at the start:

- Software and app services
- Licensing
- Infrastructure
- Sustainability culture and usage



Sometimes it's hard to see the full picture of cloud – but a third-party trusted provider can help. Our experts are ready to join you on the journey to continuous improvement!

Thinking of getting started?

Cloud optimisation can be time-consuming for in-house IT teams. It's why many companies assign cloud management to their managed IT service provider. But if you've got the time, you now also have a clear roadmap to cloud optimisation.

Don't have cloud experts in house?

We can help your company to leverage all the benefits of cloud computing and maximise in-house resources.

Over the last twenty years and more, we've helped thousands of customers across Australia and New Zealand uncover cost savings and create a better, more efficient digital business.



Meet with a CodeBlue cloud expert today to start your cloud optimisation.

code-blue.com.au



IT support
& services



Unified
communications



Cloud
solutions



Projects &
consulting



Procurement
& display

FUJIFILM
CodeBlue Australia Pty Ltd

t. 1300 562 886
e. servicedesk@code-blue.com.au
w. code-blue.com.au

FUJIFILM
CodeBlue Limited

t. 0508 IT SERVICE / 0508 48 73 78
e. servicedesk@codeblue.co.nz
w. codeblue.co.nz

codeblue

