







EXECUTIVE SUMMARY

Cloud migrations are one of the most complex processes in IT. From overrunning budgets to running under deadlines, there are many potential pitfalls for a cloud migration project. A 2019 report from Cloud Security Alliance found 90% of CIOs have experienced failed migration projects, largely due to the difficulty of moving from on-premises environments to the public cloud. Only 25% of CIOs surveyed said they completed the migration within their deadlines. McKinsey backed this up with a 2021 report revealing 75% of cloud migrations ran over budget and 38% ran behind schedule.

But it's not all doom and gloom in the cloud migration world. Many companies are embracing cloud adoption and having great success as they take their share of the \$1 trillion global cloud market. McKinsey's study revealed 15% of those surveyed pulled off a successful migration well within their budget and timeline.

As a leading IT service provider of adaptive technology solutions, Kinetic IT has worked with many organisations from the public sector to commercial enterprise on numerous cloud projects. With such a depth of experience, Kinetic IT has gained an invaluable perspective on how to successfully migrate to the cloud and achieve ongoing cloud optimisation.

This report will share some of the key insights we've gained from delivering successful cloud migrations for a range of Australian organisations, drawing on the experiences of our cloud experts, customers, and partners such as Amazon Web Services (AWS). The report will discuss why it's critical to prioritise the non-technical elements of a cloud migration and why your organisation shouldn't assume an out-of-the-box solution is the right fit. It explains how the right cloud partner can make a significant difference in your cloud migration and why preparation is one of the most important things to ensure a successful cloud migration. The report concludes by discussing how to achieve cost savings through planning and adaptability.



1. THE SECRET TO CLOUD MIGRATION SUCCESS ISN'T TECHNICAL



Many organisations prioritise the technical aspects of their cloud migrations, such as platform selection and compatibility. However, when we talk to our migrated customers about the key to their success, they often highlight the necessity of non-technical elements of cloud migration, such as business objectives, change management, and leadership buy-in.

"While it's undeniable that technical aspects are crucial in the migration process, the non-technical perspectives, are equally important. Ignoring these facets can result in suboptimal performance, additional costs, or delays in your cloud migration."



GREG JOHNSTONKinetic IT Enterprise Architect

CASE STUDY

STAKEHOLDER ENGAGEMENT KEY TO SUCCESSFUL CLOUD MIGRATION FOR AN AUSTRALIAN TRANSPORT AGENCY

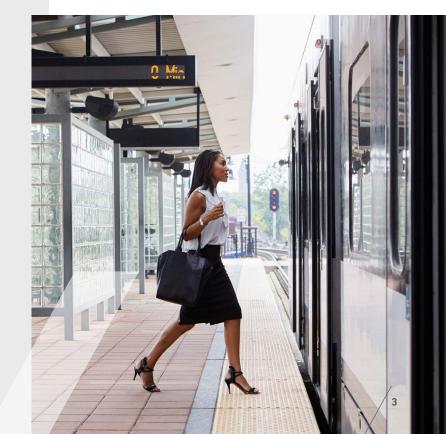
An Australian state transport agency needed to retire its data centres and move to the cloud to unlock cost efficiencies and meet environmental objectives set by its board. Kinetic IT identified early on that it would be critical to prioritise both the technical and non-technical aspects of the migration. Kinetic IT conducted careful planning to thoroughly understand the customer's needs before the migration, actively collaborating with all stakeholders from suppliers to executives. After identifying the customer's objectives, Kinetic IT adopted a risk-averse strategy in alignment with the budget and time challenges presented in the business case. The team also developed a comprehensive migration roadmap to ensure the migration of the entire data centre could be done at scale. By prioritising these nontechnical elements, Kinetic IT was able to complete the cloud migration, with the customer achieving a stable and scalable cloud environment that meets its environmental and cost optimisation objectives.

Read the full case study

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Cloud services hyperscaler Amazon Web Services (AWS) backs these sentiments. Controlling 32% of the entire cloud infrastructure services market and with thousands of migrations under their belt, AWS attest that one of the most common reasons cloud migrations fail is because they concentrate on the technical elements and neglect the essential non-technical perspectives, such as obtaining alignment from the senior leadership team, setting aggressive top-down goals, training your team effectively, and building a methodical, step-by-step cloud migration plan to avoid paralysis from overly complex tasks.

McKinsey's research also found the main characteristics of successful cloud migrations were committing to up-front investments, prioritising security and compliance, hiring the right cloud experts, and developing complete cloud migration roadmaps before the move. It's also critical to obtain strong buy-in from the CEO. Successful companies were 32% more likely to have involved CEO sponsors who were visibly active in developing and supporting the complete cloud migration strategy and implementation roadmap, including the security and compliance elements. It's clear that cloud transitions are more likely to succeed when the CEO is on board and aligns the cloud objectives strategy with overarching company goals. Leadership buy-in also ensures the business can secure the right technology to drive strategic outcomes such as growth, speed to market, operational efficiency, and productivity gains.



2. ONE SIZE DOESN'T FIT ALL

Off-the-shelf cloud solutions might seem simpler on the surface, but they're not optimal for every organisation. What commercial solutions offer in deployment speed, shifting the burden of maintenance, and cheaper initial costs, they lack in flexibility, control, and business alignment.

Kinetic IT works with many organisations with large, complex environments and legacy business-critical systems, and we've seen how the intricacies and unique requirements of these organisations can't always be met by off-the-shelf cloud offerings. Cloud providers offer countless products and services, blueprints, and frameworks to meet a vast array of needs, but they don't consider an organisation's unique business context and can't account for every potential complexity. Organisations need to ensure they consider whether an off-the-shelf or customised approach is better suited to solve their business challenges, especially when they have legacy data, systems, and applications that are critical for operating their business.

Kinetic IT Enterprise Architect, John Jamieson, says overlooking data dependencies, system integrations and business processes can be a costly mistake, and it's easy to see why. McKinsey's 2021 report revealed missteps in coordinating a migration are inflating costs by 14% and delaying migrations for 38% of companies, and IT research

and advisory firm ADAPT claims that deeply ingrained legacy systems and applications are holding Australian organisations back, with 55% of organisations surveyed citing this as their main obstacle. The desire to unlock efficiencies is competing with the fear of failure. While getting it right can mean better performance, availability, and security, getting it wrong can lead to disruptions across the organisation, and rollbacks that cost time and money.

This goes beyond making decisions about moving to the cloud, which provider to go with, and whether to use their pre-existing solutions or adopt a customisable architecture, and extends to individual applications and workloads. One size doesn't fit all - for organisations, or their data. Kinetic IT Enterprise Architect, Janesh Raghwani, says it's important for organisations to ensure they're using the best solution for each workload or application, and that they have the flexibility to move between solutions as "what's best" fluctuates due to changing business needs and emerging technology. A single approach to IT infrastructure, be it an entirely onpremises data centre or relying on the solutions of a single cloud provider, is no longer meeting the needs of modern businesses, and organisations need to be selective about their cloud investments to ensure they get the most business value for their spend.

CASE STUDY

HYBRID CLOUD IS THE BEST OF BOTH WORLDS FOR GOVERNMENT DEPARTMENT

An Australian public sector department needed to consolidate disconnected ICT environments, exit several data centres, and reduce its ICT infrastructure expenditure within urgent timeframes.

The department had the intent to migrate all its data to the cloud. During a public cloud migration trial, the department experienced higher than anticipated costs and issues with the performance and latency of legacy applications. Kinetic IT worked with the department to build a cost-effective hybrid cloud environment utilising private cloud and hyper-converged infrastructure to enable them to exit four data centres and eliminate their reliance on ageing infrastructure. This solution has also given them the time and space to properly transform legacy applications into modern web apps leveraging native public cloud services.

Read the full case study





3. A CLOUD PARTNER CAN BE THE DIFFERENCE BETWEEN SOMETHING THAT WORKS AND SOMETHING THAT TRANSFORMS YOUR BUSINESS



Many organisations struggle with the complexities surrounding cloud migrations and ongoing management of cloud environments, and this is unlikely to change any time soon. McKinsey notes that while companies are looking to bring in more cloud-skilled staff, demand is tight. IT research and advisory firm ADAPT supports this, claiming that 44% of its survey respondents cite a lack of internal cloud expertise as a challenge for them, falling closely behind legacy systems and applications and architectural challenges as key pain points. In this same research, 47% of CIOs said finding cloud configuration experts is hard. Organisations are needing to turn to outside help to close these skills gaps the more they embrace the cloud.

There's a reason hyperscale cloud providers cultivate thriving partner networks. Cloud powerhouses AWS and Microsoft have thousands of customers across the globe, and they appreciate their products and services can only take customers so far on their own. Of its partner network, AWS says "Whether it's time to modernise your business, take it into an innovative new territory, or expand your solutions, an AWS Partner can be a game-changer." Microsoft says something similar of its Azure partners: "Move forward confidently, knowing your partner has proven their abilities and is committed to your success." Cloud providers bring the products and services; partners bring the skills and experience to help customers get the most business value out of them.

John Jamieson says cloud success is about making the right choices, and to do that, you need the right information. The right partner will take the time to understand your organisation including its current state and objectives, right down to the nuances and complexities of its environment and processes. Only when armed with this information can a cloud services provider help you select the offer with the best value for your organisation, with no vendor lock-ins and no upselling of products and services - just commitment to your organisation's success. Whether you're concerned about creeping costs, unsure of when and how to opt for a customised solution, or simply lack the capability to action your roadmap, a cloud partner like Kinetic IT helps you navigate the complexities of cloud with confidence.

CASE STUDY

KINETIC IT USES BUSINESS KNOWLEDGE TO RECTIFY MISALIGNED CLOUD ENVIRONMENT

A large Australian education provider had been provided with a blueprinted landing zone that had not been configured to meet their unique requirements and failed to account for dependencies and integrations between data and systems. There was also a disconnect between this landing zone and the existing processes that enable the effective delivery of IT services to the business. When migration activities began, it became clear that this environment was not fit for purpose for the customer and needed reconfiguring to ensure that its systems could accommodate the systems and applications being migrated without disrupting operations while also aligning to the operating model of the managed service provider that would be managing the environment. Kinetic IT used its in-depth knowledge of the customer's environment, business objectives and technical requirements to reconfigure their landing zone, ensuring it's equipped to support their data centre exit and can serve as a foundation for continual optimisation and modernisation of their cloud environment.

Read the full case study





4. 90% OF THE WORK IS IN THE PREPARATION



We know the key to a successful cloud migration is careful planning, but there's an equally important step between setting your strategy and moving your data: preparation.

Kinetic IT Enterprise Architect, Adrian Lobo, says moving workloads is the easy part. There's a lot of groundwork that needs to be done before any migration can take place. First, you need an environment to migrate to.

A cloud environment has many architectural components including network layout, server instances, storage options, and security measures. Each of these components needs to be purposefully designed and established to support the organisation's cloud adoption roadmap. The organisation should consider its future needs when designing its initial architecture to ensure a strong foundation to build on.

This doesn't mean getting bogged down in the details. An iterative approach to migrating workloads can give organisations agility, as long as they've built their foundation with the scalability to grow as their adoption increases.

It's expected that tweaks will need to be made here and there, but good preparation should help the organisation avoid the need to rebuild parts of its architecture whenever a workload exposes a challenge – which can result in a cloud experience that is less than optimal, throwing up missed opportunities for optimisation, operational disruptions, and wasted spend.

Kinetic IT Solutions Architect, Nathan Alberti, recommends that organisations execute a proof of concept migration for complicated workloads, or concentrate on small, low-risk workloads in early migration waves to test the chosen migration approach, tooling, and changes in the operating environment. This approach empowers the organisation to validate assumptions, identify potential challenges, and evaluate the efficacy of its migration strategy, allowing timely revisions before committing to larger or more complex workloads.

CASE STUDY

KINETIC IT SETS CRITICAL INFRASTRUCTURE PROVIDER UP FOR SUCCESS WITH FUTURE-PROOF CLOUD FOOTPRINT

A critical infrastructure provider needed to establish a cloud presence to host a cloud-based application that would replace its legacy file and records management system. Knowing the organisation had ageing infrastructure and several infrastructure modernisation initiatives on the horizon, Kinetic IT worked with the cloud provider to ensure that the architecture design for the customer's cloud environment would not only accommodate the new enterprise content management system, but also provide a foundation to enable continued adoption of cloud services to support other initiatives, including gradually reducing its on-premises footprint and migrating its demilitarised zone to AWS so data could move directly, but still securely, to and from the internet, without needing to rely on the on-premises infrastructure.

Read the full case study.



5. PLANNING AND ADAPTABILITY IS KEY FOR COST SAVINGS



Spending in the cloud is booming. The latest forecast from Gartner shows spending on public cloud services is set to grow 21.7% to \$597.3 billion in 2023, up from \$491 billion in 2022. Gartner predicts enterprise IT spending on public cloud will exceed traditional IT spend by 51% in 2025. Many organisations are prepared to spend now on cloud migrations to reap the long-term benefits of reduced spending on data centres and infrastructure and more controlled spending in the public cloud. However, unlocking the promised cost savings is more complex than simply migrating to the cloud. Surveys show that around 30% of cloud spending is wasted, emphasising the need for more thoughtful and optimised cloud cost management.

CASE STUDY

PLANNING AND MANAGING CLOUD COSTS FOR AN AUSTRALIAN EDUCATION PROVIDER

A large Australian state government department had increasing concerns about cloud overspending and budget overruns. Kinetic IT worked directly with the customer to establish robust strategies and processes to effectively manage their cloud spending. The team developed thorough and custom procedures for managing cloud budgets and alerts, including tracking, accessing, and modifying cloud resources. The solution integrated governance, with enhanced forecasting functionality triggering reviews and actions at spending thresholds, preventing future bill shock. The customer now has a scalable and adaptive cloud cost management function, with customised budgets, alerts and resource allocation for all cloud workloads, and regular and transparent cost reviews to ensure ongoing cost optimisation.

Read the full case study

Kinetic IT Enterprise Architects, Warren Jervis and John Jamieson, both say they've seen many organisations struggle with bill shock, financial losses, and failed migrations after racking up enormous – and avoidable – expenses. There are many ways it can happen, as organisations often misunderstand the complex web of unpredictable usage patterns and pricing models, from pay-as-you-go models to reserved and spot instances.

To avoid this, organisations should conduct cost assessments before the migration, regularly assess workloads and reallocate resources, and implement cost-saving techniques such as auto-scaling. John cautions against spending as little as possible on cloud services. While it can be tempting, it can lead to service unavailability, data loss, and poor responsiveness and scalability when your customers need it.

Instead, organisations should also adopt a modern, agile approach, and recognise that cloud cost optimisation is an ongoing process requiring continuous adaptation. AWS agrees and works with their partners to implement their proven Cloud Financial Management (CFM) framework for cost optimisation at every stage of the cloud experience.

"To help customers identify, quantify and realise value creation opportunities at different stages of their cloud journey, the AWS Cloud Economics team has built mechanisms jointly delivered with our partners such as Kinetic IT to help our customers apply the four pillars of the Cloud Financial Management (CFM) framework which include Measurement & Accountability, Cost Optimisation, Planning and Forecasting and Cloud Financial Operations to see where costs are coming from, save on cloud bills through optimisation methods, plan for dynamic cloud usage, and run operations while they scale on AWS."



ASHISH ARNIKAR

APJ Leader for Private Pricing

& Cloud Economics, Public Sector,

Amazon Web Services





KEY TAKEAWAYS



One of the most common reasons cloud migrations fail is because they concentrate on the technical elements and neglect the essential non-technical perspectives, such as securing stakeholder buy-in, the right team, and effective governance.



Off-the-shelf cloud solutions might seem simpler on the surface, but they're not optimal for every organisation, as they lack in flexibility, control, and business alignment.



With 47% of CIOs struggling to find cloud configuration experts, the solution is to partner with an expert cloud provider to achieve a swift and successful cloud migration.



Migrating cloud workloads is the easy part. Organisations need to focus on the critical groundwork that needs to be done before any migration can take place, including building the right cloud environment.



With 30% of cloud spending wasted despite over-prediction of cloud costs, the modern approach is to strike a balance between forward planning and long-term adaptability.



ABOUT KINETIC IT

Kinetic IT is a leading Australian-owned IT service provider of adaptive technology solutions that harness human intelligence, enhance the user experience, and drive meaningful change across organisations. We deliver a range of solutions across cloud, cyber security, automation, data, and service management, transforming some of the largest and most complex local and global environments.

Kinetic IT Cloud partners with global hyperscale providers including AWS and Microsoft Azure to help Australian organisations securely transition to the cloud and succeed in today's digital world. We deliver industry-leading cloud solutions tailored to your business, whether you're initiating or optimising your cloud transformation or establishing your cloud practice. By leveraging our nationwide expertise and dedication to customer success, we help drive your business forward and achieve a competitive edge through greater operational agility, scalability, and cost efficiency.

Get in touch with our expert team to find out how you can move to the cloud with confidence and unlock your full potential.

