

LEVERAGE THE POWER OF AWS WITH LAMBERT LABS

A guide to successful cloud migration
for small-to-medium sized businesses



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SUCCESSFUL CLOUD MIGRATION IS CRITICAL FOR GROWTH

In today's dynamic landscape no forward-looking small-to-medium sized businesses (SMBs) can afford to stand still. Innovation and adaptability are the paths toward growth, but that journey can only start once your organisation has gained the operational agility that will set it apart and drive competitiveness – and for that, you need to embrace the cloud.

For SMBs with computing infrastructure still on-premises, moving to the cloud is a necessary first modernisation step. For those on the cloud, slow and unreliable providers can be a hindrance. For those that are already making use of cloud computing but are not making the most of what the cloud can offer - the challenge for them is to effectively migrate workloads and assets to an enhanced platform.

Embracing new cloud technologies isn't easy. Your business might lack the know-how to implement a migration or not possess the skills needed to maintain cloud workloads. And how will you make sense of the

different storage options or understand what legacy apps and services will function best in the cloud? It's hard to know how a migration will impact application and infrastructure behaviour.

To ensure the best outcome for your business, you need to work with a migration expert. With the right partner, you can create a robust strategy and gain access to the skills, knowledge, tools and technologies needed to guide your team and enable a successful migration.

In this guide, we'll outline how the combination of Lambert Labs and AWS can set up your SMB for future success.

“As an AWS Advanced Consulting Partner, we have a team of AWS experts ready to help you with your cloud migration. By using the very latest, best-in-class DevOps methodologies, we can help deliver the operational and organisation flexibility your SBM needs”



George Lambert
Founder & CEO,
Lambert Labs

WHY YOUR BUSINESS NEEDS AWS & LAMBERT LABS

Organisations of all shapes and sizes are in pursuit of innovation, responsiveness, and the ability to drive change. That's why so many are moving to AWS. Embracing AWS can bring you the modernisation needed for efficient and successful DevOps that yield measurable and impactful results.

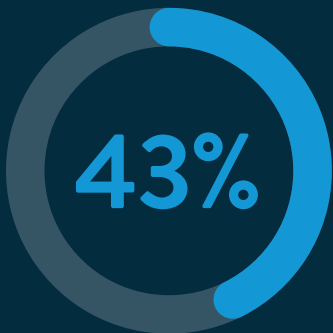
Migrating to AWS will bring multiple benefits and fresh opportunities, but first you need to get the change you need by either avoiding or overcoming the handful of challenges that may arise during transformation.

That's why the support of an experienced AWS Advanced Consulting Partner like Lambert Labs is so crucial. We will help you proactively anticipate and overcome your migration challenges to help you reap the rewards of the cloud even sooner.

WHAT BUSINESSES TYPICALLY GAIN FROM MIGRATING TO THE AWS CLOUD¹:



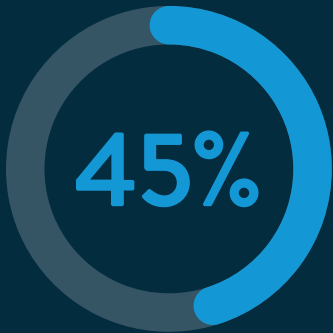
decrease in
unplanned downtime



lower time to market
for new features



cost savings in
technology infrastructure



fewer security
related incidents

¹ "The Business Value of Migration on Amazon Web Services," The Hackett Group, 2022

HOW LAMBERT LABS WILL DELIVER YOUR SUCCESSFUL AWS CLOUD MIGRATION

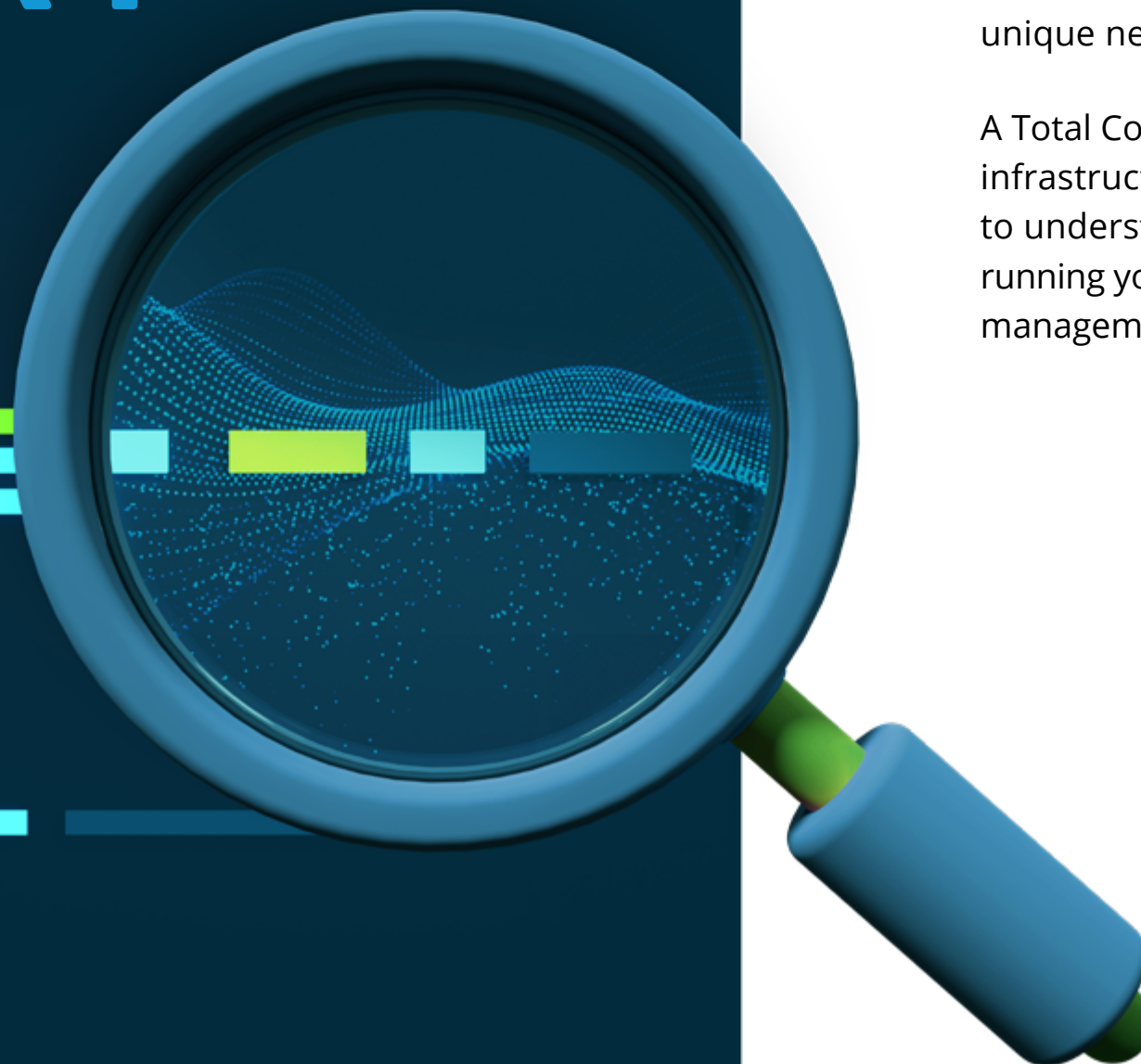
Our proven three-step process reliably delivers successful AWS Cloud migrations. Adopting our process provides the smooth and efficient transition needed to address and overcome your unique migration challenges.

Select a step to learn more

STEP 1. DISCOVERY

The initial stage of the Discovery phase is a workshop with our expert Solution Architects. This collaboration session is an engagement with those people responsible for infrastructure within your organisation. The session is used by us to gain insights into your workloads including hardware, applications, databases and data storage - all vital information that will help us understand your unique needs.

A Total Cost of Ownership (TCO) analysis of the existing infrastructure will also be conducted. This allows us to understand the total current costs associated with running your infrastructure, including hardware, software, management and support.



STEP 2. PLANNING

This stage sees the formation of a bespoke migration plan and TCO estimate for your move onto new AWS infrastructure. During this stage, we will share and collaborate directly to ensure our plan aligns with your exact requirements.

As we create our joint migration plan, we'll customise our approach to suit your delivery needs and unique circumstances. This could mean enabling an 'all-at-once' migration or planning for a phased approach for project delivery.



GETTING YOUR INTEGRATION RIGHT – HERE ARE JUST A FEW OF THE AWS SOLUTIONS WE TYPICALLY BUILD INTO OUR PLAN

Amazon Elastic Compute Cloud (EC2)

EC2 provides resizable virtual servers (instances) in the cloud, allowing your organisation to run applications and manage computing resources easily.

Amazon Relational Database Service (RDS)

Lambert Labs has extensive experience migrating databases to RDS. This is a fully-managed database service that simplifies database setup, operation and scaling. It will support popular relational databases including MySQL, PostgreSQL, and SQL Server.

Amazon Elastic Container Service (ECS)

ECS is a scalable container orchestration service that allows organisations to easily deploy, manage and scale Docker containers on AWS. It simplifies the process of containerised application deployments.

Amazon S3

S3 (Simple Storage Service) is an object storage service that provides secure, durable and scalable storage for a wide range of data types. S3 makes it easy to store and retrieve any amount of data.



STEP 3. IMPLEMENTATION

This phase is all about ensuring a smooth rollout of your new cloud environment. With a timely and challenge-free deployment, your business can start realising the benefits of AWS sooner and with increased confidence.





Staging Infrastructure

This part of the process is the sandbox. It provides a safe and controlled environment for testing, validating and fine-tuning your new cloud-based systems. By creating a staging environment first, we can reduce risks associated with migration, enhance overall system performance and increase confidence in the success of the cloud deployment.

AWS Well-Architected Review

This review provides your organisation with a comprehensive infrastructure audit ahead of the move to production. By addressing the key pillars of your AWS infrastructure – such as security, reliability, and cost optimisation – we ensure an optimised AWS environment, leading to improved performance and a more robust cloud presence.

Production Infrastructure

This final stage of delivery is where the migrated applications, services and data are deployed and made available to end-users. Your production workload will now be running on your AWS environment and will replace your on-premises or legacy system.



ENSURING YOU ACHIEVE YOUR DESIRED TECHNICAL OUTCOMES

WITH A FULLY FUNDED AWS WELL-ARCHITECTED REVIEW

You might not necessarily be familiar with the [AWS Well-Architected Framework](#), but it's a unique value-added opportunity for AWS customers. By working through the framework, we review your infrastructure against architectural best practices to identify potential opportunities for improvement. This review is a crucial stop-check to ensure all aspects of your cloud infrastructure are configured properly, enabling them to harness the full potential of AWS services while adhering to best practices.

Lambert Labs is part of the AWS Well-Architected Partner Program. This gives all our customers the additional benefit of having the review completely funded by AWS.



CONDUCTING AN AWS WELL-ARCHITECTED REVIEW DURING IMPLEMENTATION BRINGS MULTIPLE BENEFITS:



Security

Identify potential vulnerabilities and implement robust security measures to safeguard data, applications, and infrastructure from threats and unauthorised access.



Reliability

Create a system that can handle failures and disruptions without major impact. Implement redundancy and fault tolerance measures to maintain high availability and reduce downtime.



Cost optimisation

Fine-tune AWS configuration to enhance system performance and enable cost reduction through elimination of any unnecessary resources or underutilised services.

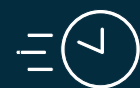


AS YOU MIGRATE, IT ALSO MAKES SENSE TO CREATE A DEVOPS CULTURE

By combining DevOps philosophies, practices and tools, your IT team can help improve your ability to deliver applications and services at an increased velocity – this is the AWS way. A DevOps culture is a step away from traditional separate software development and infrastructure operations teams. It enables faster development of new products and easier maintenance of existing ones.

Lambert Labs has the AWS DevOps Consulting Competency, making us suited to migrating customer workloads to AWS while instilling a DevOps culture within the organisation.

BY INSTILLING A DEVOPS CULTURE, YOU CAN BENEFIT FROM:



Faster time-to-market by streamlining your development and deployment processes, enabling you to bring new features and products to market more quickly



Enhanced security and compliance to minimise vulnerabilities, protect sensitive data, and adhere to industry-specific compliance standards



Improved operational efficiency and increased productivity by optimising your infrastructure, automating repetitive tasks, and implementing continuous integration and continuous deployment (CI/CD) pipelines



Reduced costs by optimising your AWS infrastructure, ensuring that you are only paying for the resources you absolutely require



Scalability and flexibility through designing and implementing scalable solutions that can grow with your business

AFTER IMPLEMENTATION, ONGOING MAINTENANCE AND MONITORING IS CRUCIAL

Maintaining a reliable and efficient cloud environment requires ongoing support. As your migration partner, Lambert Labs is best placed to help with your cloud maintenance and monitoring.

Our support includes uptime monitoring, security updates and patches to infrastructure, optimising resource usage and cost optimisation. We also detect and respond to any security incidents.

By proactively addressing issues and following best practices, organisations like yours can maintain a secure and high-performing AWS environment to ensure smooth and efficient business operations.



AFTER GETTING YOUR INTEGRATION RIGHT – WE CAN HELP YOU LEVERAGE AWS SERVICES FOR CONTINUED PEACE OF MIND AND IMPROVED MANAGEMENT AND SECURITY. HERE’S A HANDFUL OF THE AWS SERVICES WE CAN OVERSEE FOR YOU:

Amazon CloudWatch: This monitoring and observability service lets you collect and track metrics, monitor log files and set alarms to respond to resource and application changes within your AWS environment.

Amazon Inspector: This automated security assessment service helps discover and identify security vulnerabilities in your applications and resources. It provides actionable insights to improve your security posture.

AWS Security Hub: This security service aggregates, organises, and prioritises security findings from various AWS services. It gives you a centralised view of your security posture and simplifies threat detection and response.

AWS CloudTrail: This enables auditing and monitoring of AWS API requests, providing a detailed history of activity and changes to resources. It helps you with compliance, security analysis and troubleshooting.

AWS Control Tower: This service helps to set up and govern a secure, multi-account AWS environment with best practices. It provides guardrails and automation for a compliant and well-architected cloud infrastructure.



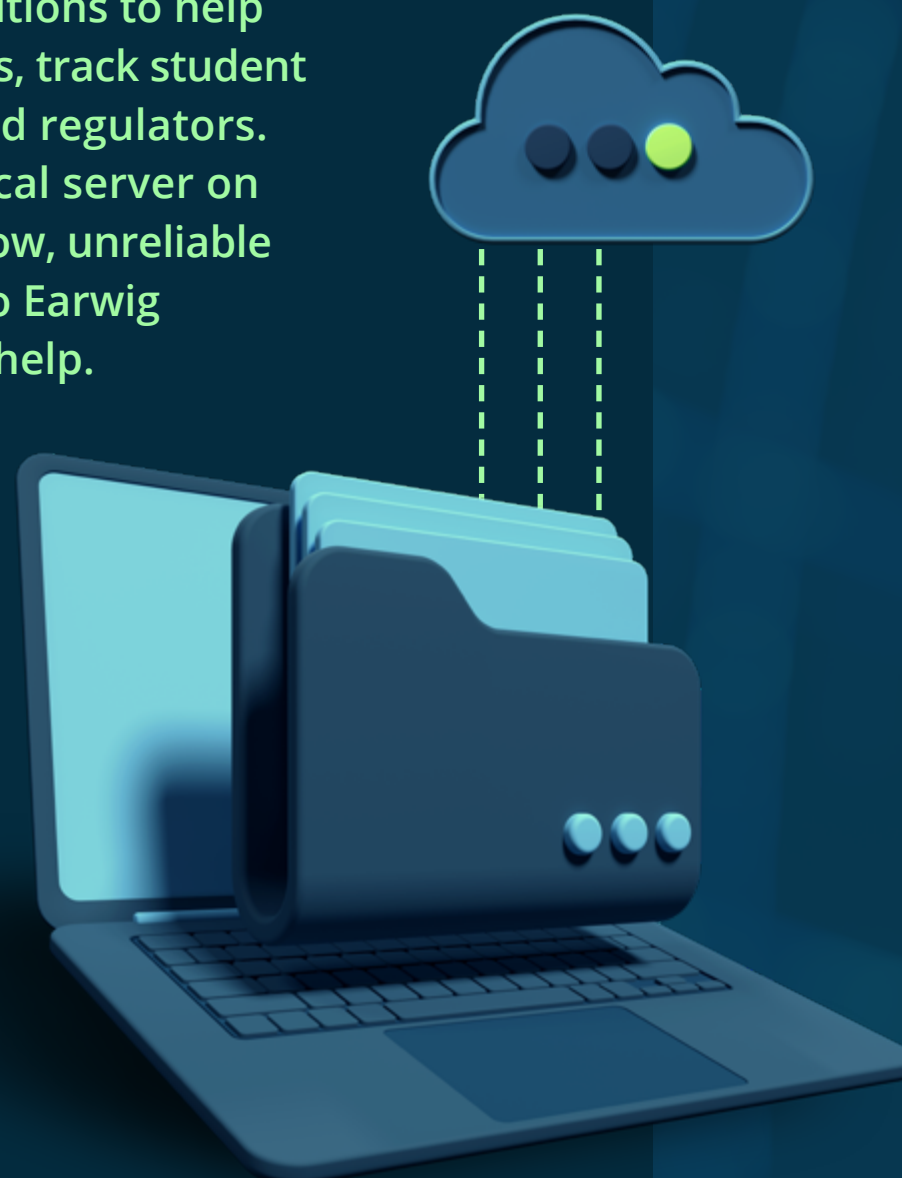
CASE STUDY | earwig

HOW LAMBERT LABS MIGRATED EARWIG ACADEMIC TO AWS

Earwig Academic provides schools with solutions to help collect teaching evidence, make assessments, track student progress and create reports for parents and regulators. Their application used to run on one physical server on another cloud provider. This proved to be slow, unreliable and presented a significant business risk, so Earwig Academic reached out to Lambert Labs for help.

Earwig migrated successfully to AWS in just...

1 WEEK



The new infrastructure is stable, scalable, and delivers...

20% FASTER
load times

Essential migration, just in time

Lambert Labs began by building a staging environment on AWS, where changes could be tested ahead of deployment to a production site on the previous hosting provider. The staging environment proved essential when Earwig Academic's server failed beyond recovery. Lambert Labs successfully migrated Earwig's solution components to AWS, utilising Amazon EC2 for the application and Amazon RDS for MySQL for the database. They also moved Redis workloads to Amazon ElastiCache, ensuring efficient and high-performing data storage for real-time applications.

Stability, scalability and performance opens global opportunities

With AWS, Earwig now has greater insight into the health, usage and performance of its solution. Use of Amazon CloudWatch enables the collection and visualisation of real-time logs, metrics and event data. With the stability and scalability of AWS, Earwig can now focus on growing their business globally.

A LITTLE MORE ABOUT US...

Lambert Labs is an innovative software development and cloud computing consultancy. Founded in 2017, our team comprises AWS experts who specialise in software engineering and cloud computing.

Our wide-ranging expertise encompasses application development, seamless database migration, digital transformation, reliable managed hosting, state-of-the-art containerisation and management of microservices architecture.

20 + AWS Certifications

- AWS Certified Solutions Architect - Professional
- AWS Certified DevOps Engineer – Professional
- AWS Certified Solutions Architect - Associate
- AWS Certified SysOps Administrator - Associate
- AWS Certified Developer - Associate
- AWS Certified Cloud Practitioner

AWS Competencies

- DevOps Consulting Competency

Partner Programs

- Advanced Tier Services
- AWS Well-Architected Partner Program
- AWS Public Sector Partner
- APN Immersion Days

AWS Service Validations

- Amazon RDS Delivery
- AWS CloudFormation Delivery

“The Lambert Labs team is highly diligent and knowledgeable, consistently providing insightful solutions across the AWS stack and beyond. Their experience with diverse clients makes them the go-to consultancy for understanding the latest and most suitable AWS services. **We recommend them to anyone seeking to build and deploy modern, scalable applications on AWS.** We look forward to continuing to work with and learning from them.”

Will Croft
CTO, Boost Technology

LET'S START YOUR CLOUD TRANSFORMATION TODAY

Contact george@lambertlabs.com to book your free AWS migration assessment.



- Public Sector
- Immersion Day
- Amazon RDS Delivery
- DevOps Services Competency

- AWS CloudFormation Delivery
- Well-Architected Partner Program