

# Migration Solution Brief



## Why Public Cloud?

Consumption of Cloud computing can be broken down into three distinct areas:

- **Cloud Native Capabilities** – Modern technology that cannot be consumed in a traditional infrastructure manner, for example, includes Serverless, Machine Learning, Artificial Intelligence, Augmented Reality etc. The opportunity to start from scratch enables organisations to differentiate from their competitors.
- **Migrating Existing Assets to the Cloud** – Transforming existing workloads by leveraging faster, easier and cheaper benefits of the Cloud. This shouldn't be confused with moving slow monolithic applications to the Cloud as you still end up with that old messy application just somewhere else.
- **Integration and Automation** – When consuming Public Cloud effectively, there are capabilities which allow you to remove the human element and reduce the risk of errors. Services can become more efficient since businesses can react based on events, such as sales campaigns requiring more infrastructure provisioning and scaling back when demand drops.

Public Cloud enables organisations to test new technology or business use cases without significant investment. If these trails don't work as hoped, Public Cloud enables them to fail fast with little consequences. The key is not to build the perfect plan upfront. Instead, start quickly, with initial use cases and iterate as more information is gathered and lessons are learnt.

## Business Drivers for Migrating to the Cloud



Agility



Cost Reduction



Reduce Risk



Technical Debt



Innovation



Digital  
Transformation



Data Centre  
Rationalisation



Reduce Time  
to Market

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## Benefits of Migrating to the Cloud

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**Trade fixed expense for variable expense** – Instead of investing heavily in data centres and servers before you know how you're going to use them, you can pay only when you consume computing resources, and pay only for how much you consume.

**Benefit from economies of scale** – By leveraging Cloud computing, you can achieve a lower variable cost than you can get on your own. Because usage from hundreds of thousands of customers is aggregated in the Cloud, providers such as AWS can achieve higher economies of scale, which translates into lower pay as-you-go prices.

**Stop guessing capacity** – Eliminate guessing your infrastructure capacity needs. When you make a capacity decision prior to deploying an application, you often end up either sitting on expensive idle resources or being constrained with limited capacity. With Cloud computing, these problems go away. You can access as much or as little capacity as you need and scale up and down as required with only a moment's notice.

**Increase speed and agility** – In a Cloud computing environment, the availability of IT resources reduces from weeks to just minutes. This results in a dramatic increase in agility for the organisation since the cost and time it takes to experiment and develop significantly lowers.

**Stop spending money running and maintaining data centres** – Focus on projects that differentiate your business, not the infrastructure. Cloud computing lets you focus on your own customers, rather than on the heavy lifting of racking, stacking, and powering servers.

**Go global in minutes** – Easily deploy your application in multiple regions around the world with just a few clicks. This provides lower latency and a better experience for your customers at a minimal cost.

**Staff Productivity** – Staff productivity can increase significantly as resources which were previously tied up with managing physical infrastructure can be repurposed to business value-adding activity.

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## Common Migration Challenges

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**Lightweight Analysis** – One of the mistakes numerous organisations make is not analysing their application stack before considering any Cloud move. This coupled with doing too much too soon has caused businesses to fail at the first hurdle in realising Cloud benefits. Without a clear view of the application and server landscape upfront it is difficult for businesses to make informed decisions as to how to maximise business value.



**Lacking a Clear Business Case** - Starting a migration to the Cloud without a clear business case highlights the lack of understanding around the benefits that will be gained by performing the migration. Businesses that end up in this situation often struggle to prioritise the migration amongst other goals and lack the appropriate organisation and investment to achieve significant benefits.



**Underestimating Cost** – Businesses regularly over-spend on Cloud migrations, forgetting key elements like migration software, IT personnel, technical debt, and existing licensing commitments. It's also easy to overlook charging mechanisms that differ greatly to non-Cloud deployments.



**Skills Gap** – Whilst internal IT staff may have some Cloud knowledge; in many cases it can be their first production Cloud migration. Without a deep understanding of Cloud services, a migration can take considerably longer than expected. There is also a risk that on-prem challenges are migrated to the Cloud too.



**Only Rehosting** – Not moving beyond “Lift & Shift” is a common problem businesses fall into. An IT department needs to consciously adapt their thinking and processes to keep the business performing in competitive markets. The process element is often what enterprises fail to consider. Cloud migrations should be much more than simply picking up an application or data and dropping it in the Cloud. Instead, migrations should be a key part of a digital transformation designed to enable business goals.

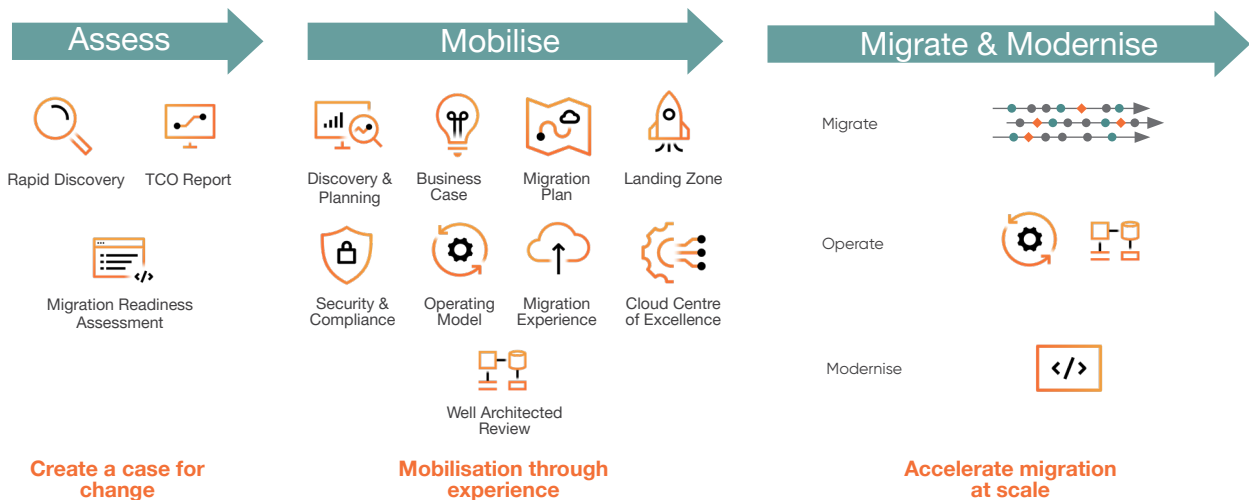
Other challenges include:



## Our Approach to Cloud Migrations

GlobalLogic recommends breaking migrations into three main phases:

- **An assess phase**, where qualification is carried out to confirm the business drivers, compelling events and technical and non-technical requirements and constraints.
- **A mobilise phase**, where a Cloud-native landing zone is built out, coupled with a suitable operating model to align people, process, and technology. Proof of concepts are carried out at this stage, to confirm each design pattern relevant to the migration.
- **A migration and modernise phase**, where a repeatable migration factory is stood up to move applications under the governance and control of the new landing zone. This is where modernisation of applications can also take place to improve efficiency and functionality.



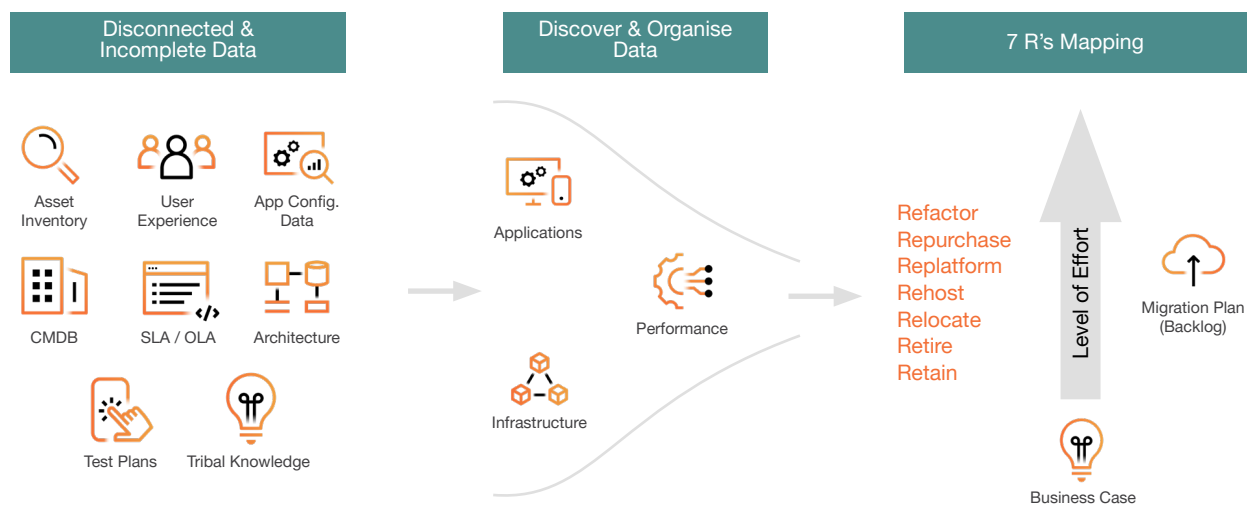
GlobalLogic has successfully used this model to help enterprise organisations and technology companies migrate to the cloud. When customers are using AWS as their target platform, we often leverage the [AWS Migration Acceleration Program](#) which provides additional guidance and funding from AWS for both the partner and the customer.

We also recommend completing the following five steps before beginning your migration journey:

### 1. Determining the correct migration paths

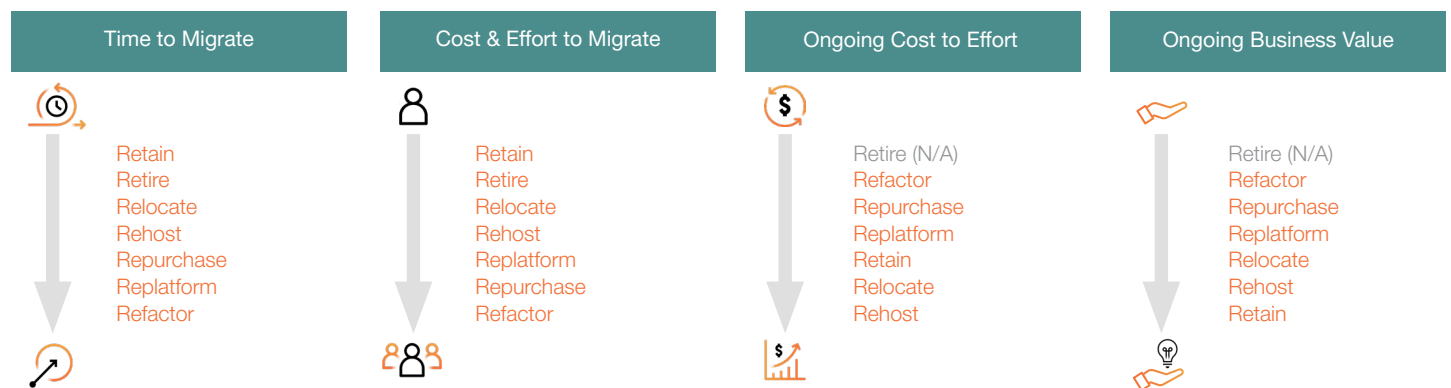
The correct migration paths should be determined based on the business drivers, requirements, and constraints of a customer’s migration.

We advocate collecting information from as many relevant sources as possible. This includes technical and leadership stakeholders, as well as hard data from the customers’ environment and the industry they operate in. This will help you make informed decisions about the appropriate migration path for your organisation.



### 2. Weighing up business trade-offs

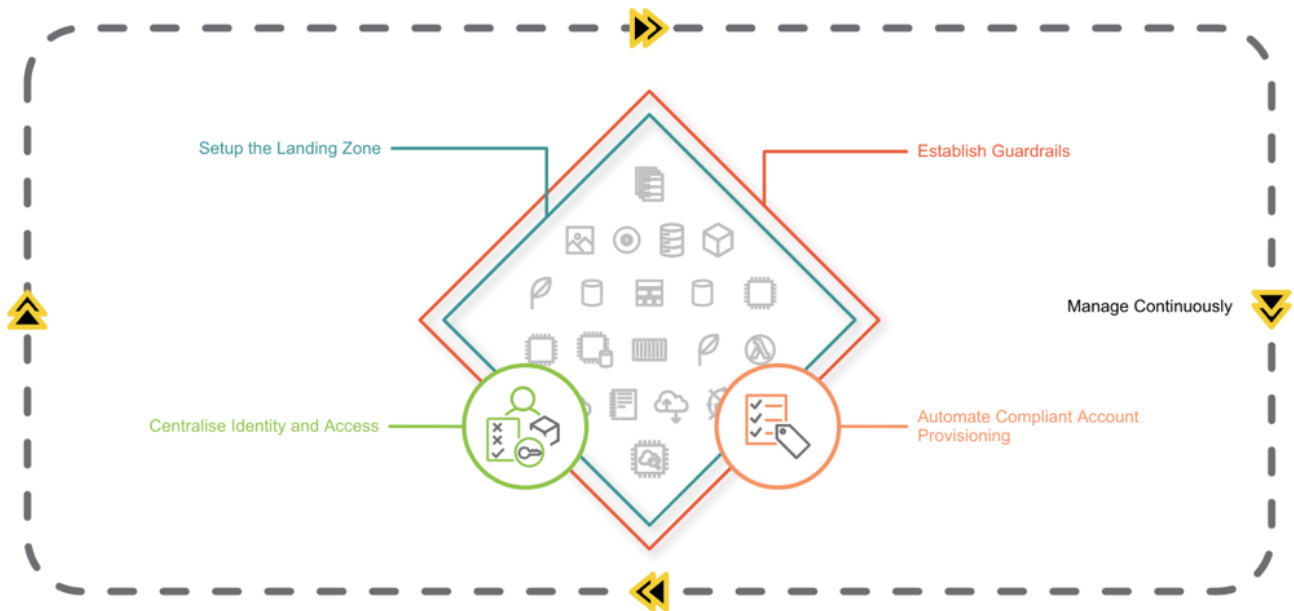
Each migration path has advantages and disadvantages. We recommend evaluating business priorities to help decipher which path will provide the most value in the long and short term. Different industries and customers will have different priorities, with some overlapping across the four categories below. There can also be other business drivers which customers want to consider outside of these.



### 3. Landing zones

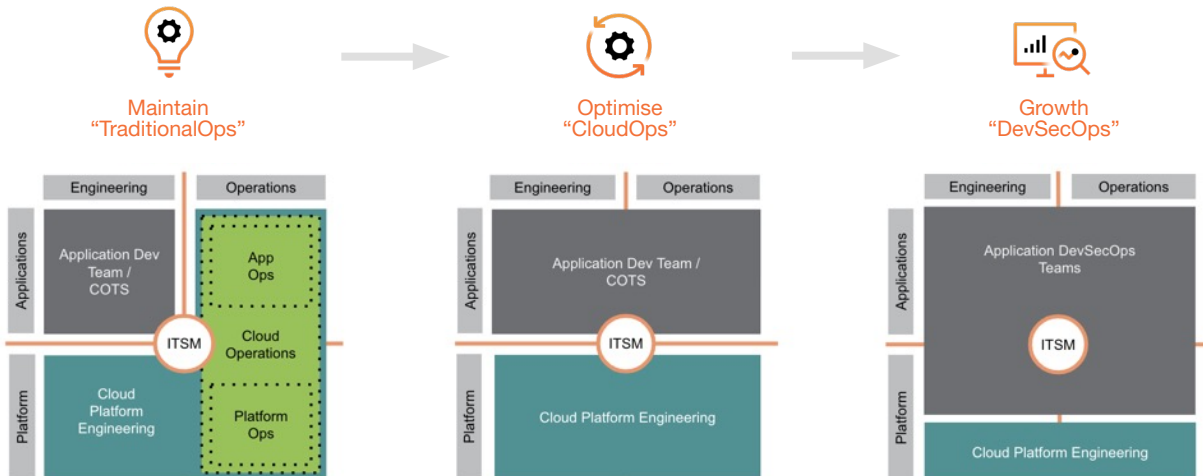
Designing and implementing a secure, reliable, and resilient landing zone can contribute greatly to the success of a Public Cloud migration. Even more so if this landing zone meets Governance requirements and scale in response to business growth.

We recommend leveraging a well thought out framework and tools such as AWS Control Tower to help ensure landing zones are fit for purpose for production workloads.



### 4. Operating models

As organisations become more mature in leveraging Public Cloud, it is important to continuously evaluate how the operating model can be made more effective to drive business value.



## 5. Well Architected Framework

Following the **Well-Architected Framework** throughout all phases of a Cloud Migration is critical to achieving success and minimising risks and failures.

Well-Architected refers to a framework to help build secure, high-performing, resilient, and efficient infrastructure for applications. The framework is based on six strategic pillars and provides a consistent approach to evaluate architectures and implement designs which scale over time.



We recommend following this framework in all key design decisions and implementation throughout the migration and on an ongoing basis thereafter. More information about GlobalLogic's Well Architected Reviews can be found on our website [here](#) and a summary of our offering [here](#).

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## Next Steps

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In a perfect world, a Cloud migration would take just a few months. In reality, it could take years.

If you're looking for a trusted partner to start your Cloud migration journey with, or have hit a roadblock on a migration you've already started and would benefit from some impartial advice, reach out to the GlobalLogic team [here](#).