

Cloud Migration Journey Support

Wherever you are on your Cloud migration, the journey is never as straightforward as it seems.

Migration programmes that start well can be stalled – or even stopped. Similarly, a programme can be under pressure to accelerate, or even decelerate to match overall change capability.

Coeus' experts explain how most problems can be linked back to the planning stages of migration. By revisiting these, they can usually be addressed. For 'bumps along the road', a Centre of Excellence can help.

COEUS CONSULTING
A WAVESTONE COMPANY

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EXPERT VIEWPOINT

"It is important to think of migration as an ongoing, flexible delivery, rather than a single project."

Cloud migration needs to be looked at across the organisation as a strategic change, rather than just 'one app at a time' in isolation."

Introduction

SUSTAINABILITY AS A DRIVER FOR CLOUD

One of the drivers for cloud migration in recent years has been sustainability. With organisations like Microsoft, Amazon and Google publishing both their sustainability metrics and strategies it has been easy for organisations to create a sustainability case for moving to cloud based on either unknown or poor sustainability scores of many existing, smaller on-premise capabilities.

The operational scale, available investment and business imperative of a focus on sustainability has made cloud providers reduce energy usage, move to renewable sources and make recycling a key priority – all of which help organisations that use their services meet their own sustainability goals.

FURTHER DRIVERS

The other huge potential benefits of Cloud services to the business are well documented, ranging from flexibility, agility, reliability of service and freeing up capital by moving to an Opex model.

Organisations are also quoting benefits related to the increased security capability and knowledge from cloud providers vs in-house teams.

However, it is more difficult to get these benefits than might be expected particularly for larger, established companies with large legacy technology estates which require significant effort, and cost, if they are to migrate to cloud.

In some cases, migration programmes get stalled – or even stopped – when the benefits are not delivered or recognised. In others, good progress is being made but IT leaders are under pressure to change the pace of the programme.

In this playbook, our experts explain how in both cases, revisiting migration planning is the way to uncover underlying issues. They also define the vital role of the Cloud Centre of Excellence and underline the importance of picking the most suitable vendors.

Common Symptoms

Most migrations will throw up at least one of these common symptoms:

LOW SUPPORT FOR CLOUD

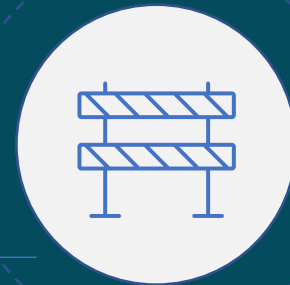
Perhaps the **biggest barrier to change** is people themselves. As with any big programme, **change management is paramount**. However, cloud can often surface **insecurities** arounds skill sets and job safety which can make progress on cloud migration and adoption slow.

OPERATING MODEL NO LONGER FITS

When making a **huge change in your technology infrastructure** it is important that operating models are also adapted to fit the **new ways of working** that cloud requires. If your operating model is not cloud appropriate you will be unlikely to realise the full benefits of your migration.

CLOUD SKILL DEFICIT

Often one of the biggest obstacles can be a **cloud skill deficit** both internally and externally. Without the right people available the **pace of migration can be seriously impeded**.



LEGACY PROCESSES

In order to support a successful migration some standard IT and business **processes should be optimised for the cloud**. However, where legacy processes are not updated this can introduce delay to key areas such as procurement or IT project initiation.

RELUCTANT DECISION MAKING

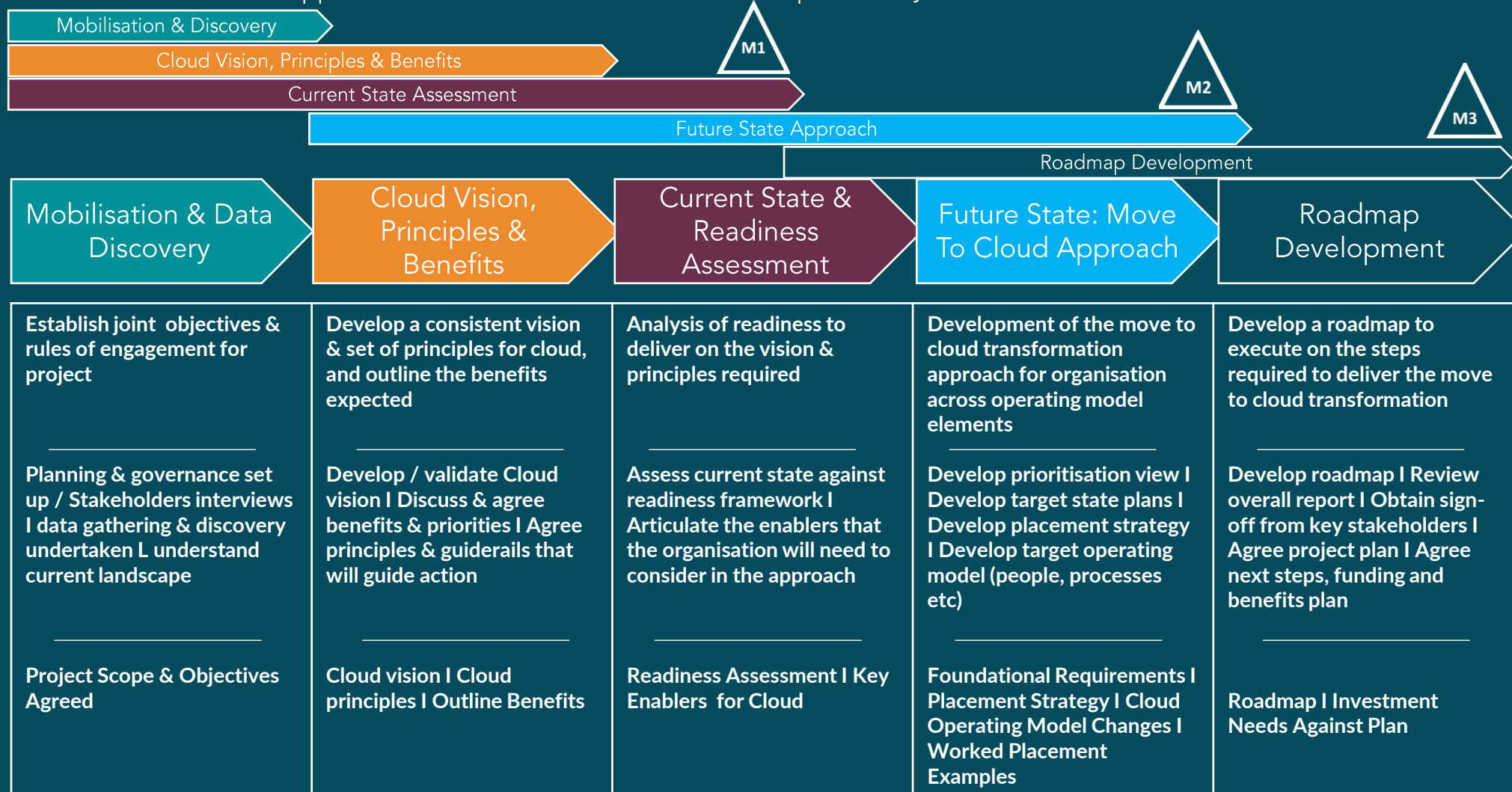
Often decision makers can be **reluctant to change**. This reluctance is often related due to **perceived unknowns around cloud**. Training and educating about the cloud is key, in order to address many of these knowledge related challenges.

FUNDING ISSUES

Although moving to the cloud can realise long term financial benefits, reducing costs should not be the driver particularly because the **cost of a migration can be high**. Often this limits how much can be achieved and how quickly and the business cases should be focussed on a cloud strategy rather than case by case.

Putting Symptoms In Context

By visualising a complete set of planning stages for Cloud migration (post business case sign-off), it's easier to understand where opportunities to address or avoid these symptoms may have been missed.

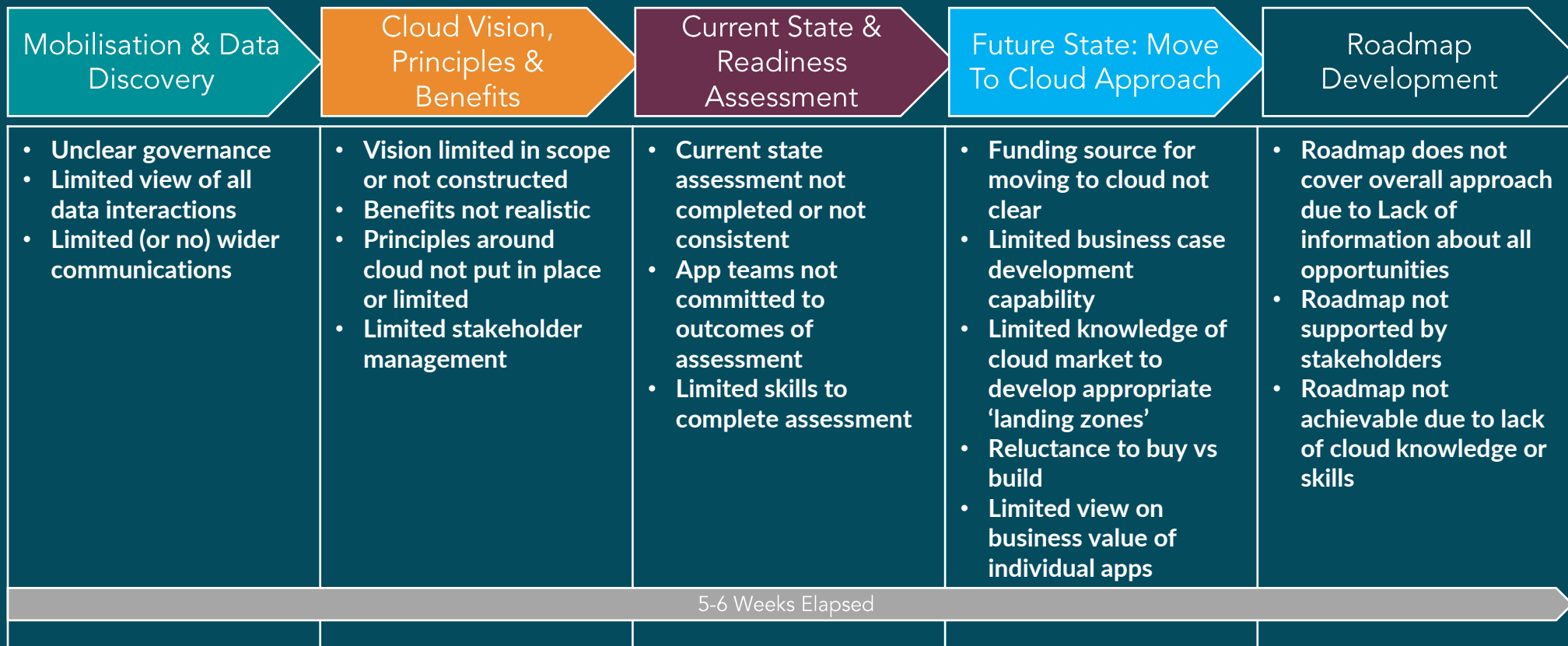


5-6 Weeks Elapsed

How To Address Symptoms / Accelerate

Symptoms occur when migration planning has not been carried out thoroughly.

Similarly, to accelerate a migration, we recommend that these stages are revisited to identify issues.



Cloud Centre of Excellence

Additional challenges can arise at any point on the journey, such as scope changes and other impacts of Cloud (such as on vendor management or security).

The best way to deal with these unpredictable challenges is to **set up a Cloud Centre of Excellence to flexibly, and rapidly, make decisions.** This approach is reliant on executive support, continuous improvement and communication.

What is a Cloud Centre of Excellence?

A cross functional team responsible for driving the migration to cloud. They are responsible for ensuring the cloud strategy is executed in a way that allows for flexibility but still maintains good practice and meets regulatory and security standards.

The core tenets of a Cloud Centre of Excellence are:






1. **Community:** using effective comms to share best practices, training opportunities, maintain and publicise a knowledge base and generally keep teams motivated about the cloud.
2. **Brokerage:** focus on the sourcing of services (working closely with architects from CCoE), procurement of these services and negotiating contracts.
3. **Governance:** creation of policies, tools and processes to manage the cloud migration and minimise risk as well as owning and tracking the benefits/business case.

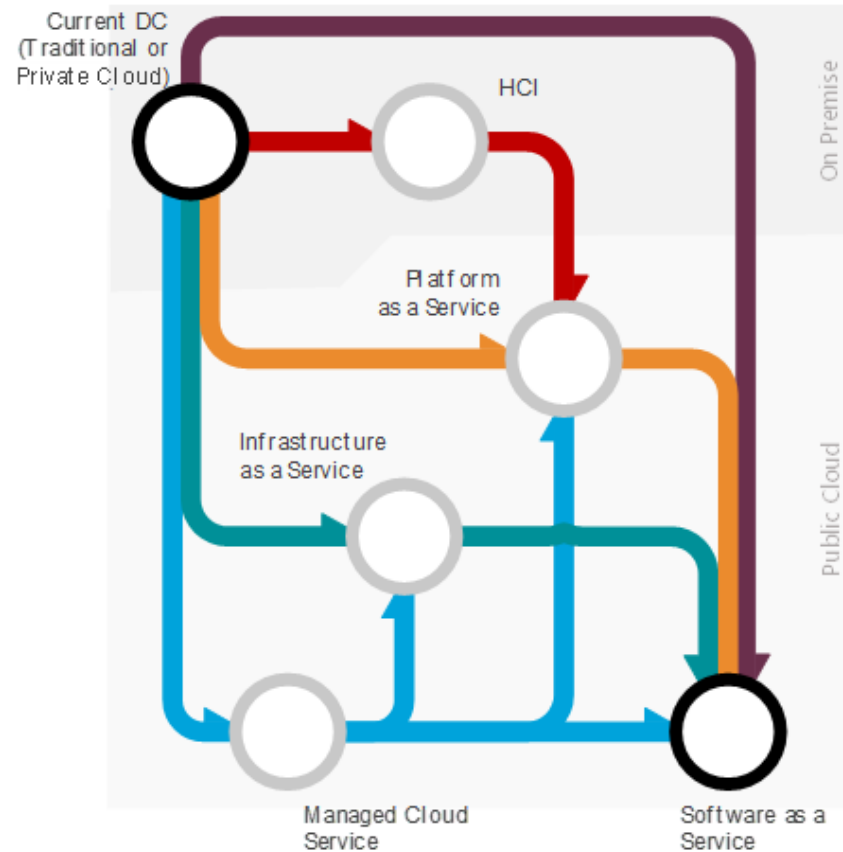
Uncovering Underlying Issues

All organisations will have their own unique challenges on their Cloud migration journey. It helps to 'work backwards' to uncover underlying issues so that they can be addressed – and your cloud journey potentially re-started.

1. Understand the different 'flavours' of Cloud

By ensuring that the full set of cloud options is understood, organisations can ensure their cloud provision meets their needs around flexibility, legacy support, integration, supportability and speed of deployment. These decisions will also impact TCO of the technology systems.

Route	Description	Subsequent Destinations	Why Choose?
 Migrate to SaaS	Application is moved to SaaS solution (Example: CRM, FigShare)	n/a	<ul style="list-style-type: none"> Transformation benefits Suitable SaaS solution Acceptable business risk
 Migrate to PaaS	Application is replatformed to a PaaS solution (Example: Research Environments)	Migrate to SaaS	<ul style="list-style-type: none"> SaaS is not suitable
 Cloud Managed Service	Application is moved to an IaaS or PaaS solution but managed by a 3rd party on our behalf	Insource service wrap (to IaaS, PaaS) Migrate to SaaS	<ul style="list-style-type: none"> SaaS is not available We don't have the skills or resource availability Compelling case to source
 Migrate to IaaS	Application is rehosted in the cloud (Example: Research Environments)	Migrate to SaaS	<ul style="list-style-type: none"> For compute service needs e.g. teaching Cannot move to SaaS (suggested migration path from vendors)
 Move to HCI or private cloud solution	Moved from traditional on prem to a cloud stack hosted locally	Migrate to PaaS	<ul style="list-style-type: none"> Business risk e.g. data confidentiality Commercial constraints (e.g. ingress charges for rapidly changing data)



Uncovering Underlying Issues

2. Understand the whole business & technology environment

By looking at the full technology requirements, beyond just 'Cloud', the right decisions can be made.

To fully understand the potential role of Cloud in your organisation, it is important to look at the wider business requirements, and how broader technology can drive these.

Cloud is not always the right answer for all applications or services; a well-constructed assessment process should be used to identify the suitability and feasibility of moving individual components to different cloud options. This will ensure consistency and help to build both the case for change and the initial migration plan.

Also, consideration needs to be given as to how it will all work together once a piece of the 'jigsaw puzzle' has changed, particularly where more than one cloud vendor is used.

Changing one piece – Cloud – will have a knock-on effect for the rest of the business and for technology.



Choosing Vendors

Ensuring you are working with the right partners is also critical.

For example, with SaaS, it is mainly a case of picking the right product.

With anything Infrastructure or Platform-related, how do you choose between the vendors such as AWS, Azure and Rackspace?

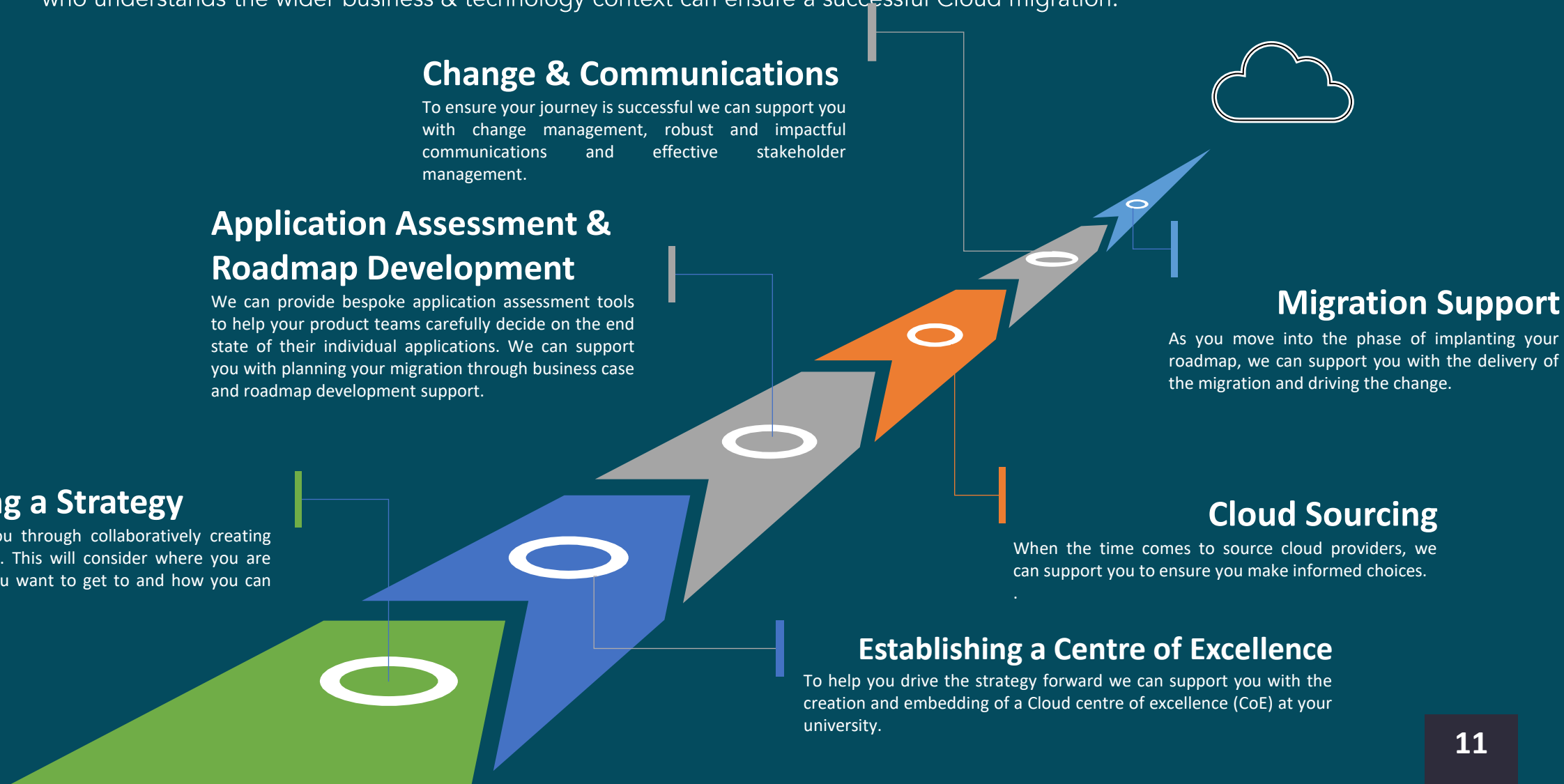
An independent partner who knows the difference between the vendors, knows their strengths and weaknesses – and their suitability – can be invaluable.

For instance, Google Cloud Platform (GCP) is currently seen as the leader around AI and Analytics whereas AWS and Azure can be easier to implement.




How Can Coeus Help?

Coeus can advise across the whole Cloud journey – from strategy and sourcing to delivery. Having an independent partner who understands the wider business & technology context can ensure a successful Cloud migration.



CASE STUDY

WORLD LEADING RESEARCH UNIVERSITY

 Revenue: £1.5bn
Employees: 13,000 +
43,000 students

HIGHLIGHTS

Unified Cloud Adoption Approach

Coeus works with one of the leading Universities to design and realize the building blocks necessary for the forthcoming Cloud Transition and gathers momentum to enable the immediate commencement of an overall, systematic move to the Cloud.

CLOUD MIGRATION SUPPORT – CLOUD CENTRE OF EXCELLENCE

The Challenge



- The University, in a position of innovation complacency due to consistently superior performance in the global field of Higher Education, was lacking the necessary momentum to make the leap from planning and strategising to an actionable, systematic Cloud Transition.
- Single service/system migrations to the Cloud were initiated and operated by disparate teams with an ad-hoc, non-calculated approach, resulting in a need for Coeus to draw up a consistent strategy for a general Cloud Transition.
- The next phase involved translating the strategy into a tactical plan supported by a Cloud Centre of Excellence (CCoE) which need to be established. The initial focus for the CCoE was to support the migration of 10 pilot services to the cloud.

Key Deliverables



- Cloud Migration Application Assessment Framework
- Cloud Migration Assessment Workshops
- Cloud Migration Target State Validations
- Cloud Migration Roadmap (Post Workshop)
- CCoE Terms of Reference
- *Provision of a CCoE interim Lead*

Our Approach



- The strategy centered around an Assessment Framework to decide on future Target states, validation methods to proofread the Target states and an overall high-level University Cloud adoption Roadmap.
- A CCoE was set up to support the delivery of the strategy with a view to establish policies, tools and frameworks as well as providing a holistic view of the individual roadmaps to ensure opportunities and risks were identified.
- Individual Assessment Workshops were led for 10 pilot services chosen by the University IT Leadership team.
- The Assessment Workshops resulted in tentative decisions on the cloud target end states and corresponding roadmaps, developed by each service owner, towards reaching those target states.

Benefits



- An interim CCoE Lead was provided by Coeus and so a successful CCoE was stood up, governance established, and communications launched.
- Due to the CCoE different university teams were collaborating towards one cloud strategy and existing processes started to be optimized for the cloud.
- Target state assessments were consistently applied across all pilot services and allowed for the creation of individual roadmaps.

PHARMACEUTICAL COMPANY



Revenue £40.3 bn+
Employees: 125,160+

HIGHLIGHTS

Adaptable Private Cloud

An adaptable private cloud was developed to host the client's core business processes.

Scalable and Flexible Supply

A highly flexible and scalable platform was created with supply scalable to the client's needs and demands.

PRIVATE CLOUD HOSTING ARCHITECTURE

The Challenge



- Coeus was engaged to create an architecture and migration plan to replace the aging virtualized hosting environment in the global data centres – the key goals of the program were:
- Provide a low cost hosting platform that could be deployed cheaply and easily on a global basis
- To provide a scalable solution that could cope with very mixed workloads and scale to many thousands of virtual machines
- To support a Private Cloud model and reduce the overall cost of ownership by moving towards a more agile and adaptable model – this includes the integration of automation & orchestration tools
- To deliver quickly to avoid additional maintenance costs on the existing platform renewal
- To provide a modular solution that can grow and scale quickly (on-demand)
- To create a solution that can form the basis of a new integrated hosting platform – an adaptable solution that meets the needs of all current and future workloads

Key Deliverables



- The Coeus team delivered the following output to meet the goals of the project:
- Comprehensive high level technical design incorporating
- Operating model – including roles and responsibilities & migration plan
- Technical Design including:
- Hosting Platform / Hardware options – optimal configuration
- Hosting segmentation and compliant security model
- Data Protection Model – Integration & future strategy
- Data Replication and recovery model
- Global data and file storage security design – Data Classification
- Maintenance and patching process including tools
- Monitoring, management and reporting tools
- Automation & Orchestration options and integration plan
- Fully loaded 5 year cost model including capacity on demand and transparent / sustainable open book pricing

Our Approach



- Working with the technology areas (IT) and sourcing teams to create a design and selection approach that meets the requirements specified including:
- Fully research the market and advise the client on key trends and technologies (e.g. Public Cloud, Converged, HCI, etc.) - create pool of options
- Develop a full selection criteria with weightings including covering all commercial and technical aspects of the design broken down into categories – agree this with the client's technical and sourcing functions
- Carry out a down selection process to create 4 viable candidates based on market research and the client's incumbent position and vendors
- Evaluate each vendor with a 'proactive' evaluation (intensive 1 week process with a mix of benchmark tests, demonstrations and interactive design workshops) – Evaluation as a blend of operational / technical & commercial
- Score and down-select the vendor to two candidates
- Pilot the remaining two candidates – full involvement with the operations engineering teams with onsite equipment to ensure practical usability
- Final selection based comprehensive, objective justifiable recommendations

Benefits



- The deliverables produced an implementable and repeatable design that brought the following benefits:
- Far more adaptable platform – one platform to serve virtual and physical hosts with minimal administration [Single pane of glass with very low TCO]
- Highly scalable, modular model – platform can scale and grow in line with business need (small unit of scale)
- Capacity on demand model – capacity immediately available to challenge the public cloud provisioning model (circa 400 cores of processing power immediately available without paying for them until they are used)
- Easy transition and migration method – knowledge transfer and familiar interface for the client operations teams
- Lots of additional features to further lower cost / increase the solution ROI

CASE STUDY

INTERNATIONAL PROFESSIONAL MEMBERSHIP ORGANISATION

£65M income

168,000 members in 150 countries

607 employees

HIGHLIGHTS

IT resource over-committed

Workload analysis showed that the IT department was over-committed by > 30%. This was leading to a perception that project delivery was poor, when in reality it was that there was just too much work

Demand management immature

Understanding why there was too much work for the team to deal with highlighted that the management of demand between the business PMO and IT was immature and lacked openness

PORTFOLIO ASSURANCE REVIEW

The Challenge



- The organisation had identified that it was unable to deliver planned IT developments during 2020, and that further new initiatives were being planned for 2021.
- Much of the 2020 workload would continue to require effort into 2021, so the addition of new initiatives into an already over-committed organisations required urgent attention
- The IT and PMO organisations were working together on understanding the situation and asked for Coeus' support to review the in-flight programmes and projects and what mitigation could be applied.

Key deliverables



- We delivered a comprehensive, updatable resource dashboard, built using Power BI
- This dashboard was then integrated into a functioning joined up resource allocation process, which we identified was a gap in the IT management
- We proposed an approach to demand management to ensure the PMO and Business Relationship Management functions were aligned

Our Approach



- We proposed a 5 step approach:
 - Portfolio Health check – evaluating the commitment to the current activities, the plans and risks
 - Review of planning and prioritisation – understanding how business initiatives are developed into programmes and projects and integrated into the overall investment plans
 - Categorisation of portfolio risks – identifying any portfolio dependencies, risks and issues
 - Portfolio skills and resource requirements - identifying the resource hot spots for delivery of the existing and future initiatives
 - Deliver products and processes to support future resource management

Benefits



- Through our engagement the extent of the IT functions over-commitment was understood for the first time
- This enabled the IT management and PMO to engage with the business stakeholders to review the portfolio of initiatives and re-prioritise investment plans for 2021
- The resource allocation dashboard and process has provided the IT management with the tools they need to understand their commitments and availability in the future
- The IT function will become a better place to work as the over commitment is addressed

About Coeus Consulting

Coeus Consulting, a Wavestone company, is an award-winning, independent IT advisory that stands alongside technology, business & procurement leaders to deliver strategic change.

We help leaders deliver more to the organisation across the four stages of the IT lifecycle: Strategy, Sourcing, Change and Architecture.

To find out more visit www.coeus.consulting.



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