A step-by-step guide to a clear Azure migration strategy

Cloud Direct

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Why, what, and how?

For any successful Azure Migration, you need to ensure you have the right strategy in place. It can often be overwhelming trying to know exactly where to start, what you need to consider and how you make it a reality for your business. Whilst every migration is unique, ultimately the way in which everyone creates a strategy is the same. During this guide we will walk you through the things you need to consider in order to create a clear Azure Migration Strategy. So, you can move to the cloud with confidence.

There are three key questions you need to ask yourself before you start mapping out your cloud journey.

- Why are we migrating to Azure?
- What do we need to consider?
- How do we make it happen?

These questions seem very simple at the surface, but there is a lot to consider to getting your strategy right from the start.

In the diagram to the right we have broken each question down into areas of consideration that will help you answer those questions and enable you to start building your plan. Throughout this guide, each consideration will be unpicked and explored in detail, arming you with the information you need to create a successful migration strategy.

Ready? Let's jump in.
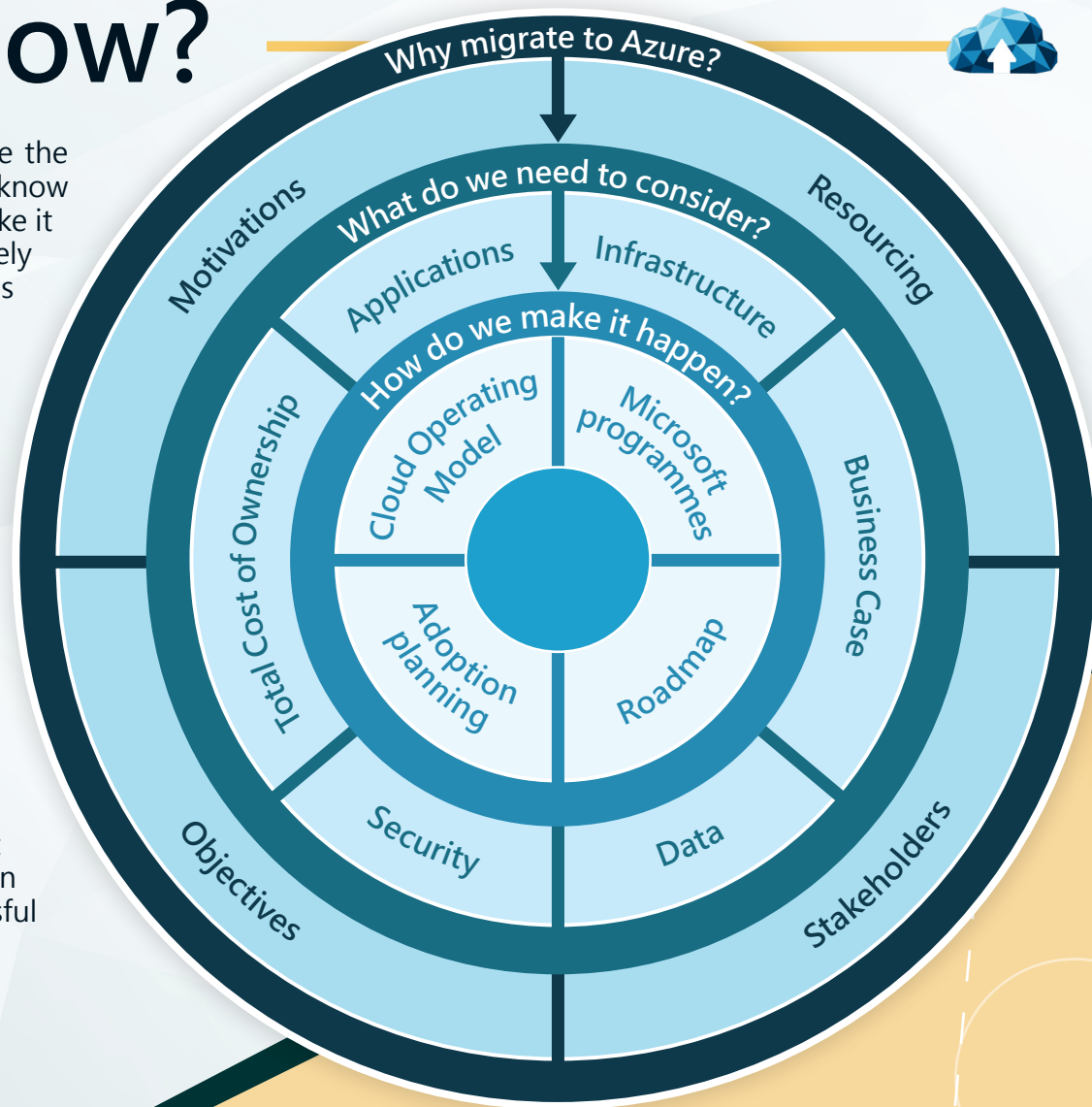
Why migrate to Azure?

The first step in building your migration strategy is to understand exactly why you're migrating. Sounds simple, right? Believe it or not, this step is often overlooked by many businesses – but it's where every successful migration starts. It is the single-most important stage in developing your strategy as it will drive any decisions you make and bring the rest of the business along with you. Here are four key areas you need to set out and understand during this stage.

Understand your motivations

With any Azure migration, there will have been something that kickstarted the journey – a catalyst. It's important to understand what that motivation is and the impact it could have on your business.

Seven common motivations that encourage businesses to migrate to the cloud are:

Unlocking innovation
Do you want to be able to analyse your business data and drive better decision making? Are you wanting to empower your business with automation? Or perhaps you are interested in unlocking the power of artificial intelligence to improve your processes?

Data centre contract expiry
Does your business have a data centre contract that's coming to an end, and as a solution you'd like to harness the full power of the cloud?

Cash flow
Are you looking to move away from CapEx IT costs and adopt an OpEx cash flow model with the cloud? Or maybe you want the freedom of only paying for what you use and scaling when you need to?

Cybersecurity threats
Are you wanting to move to the cloud to leverage the intelligent security functionality?

Scarce IT budgets/resources
Do you have limited IT staff and are looking to free them up for strategic projects by letting Microsoft do some of the heavy lifting? Helping you gain better value for money within your IT budget.

Business continuity
Are you looking to improve business continuity plans by avoiding business interruptions and downtime with the cloud?

Ability to meet surging demand
Do you have a sudden uplifts in demand and are looking to leverage cloud flexibility?

Set your objectives

Once it's clear what your motivations for migrating are, it's time to start mapping your objectives. Leverage your motivations to shape your objectives by breaking down what your business is trying to achieve. It's important to have clear SMART objectives to help you structure your plan, as you will have your end goal in mind. To make an objective SMART, it needs to be Specific, Measurable, Attainable, Relevant, and Time-bound.

Listed on the right are three common objectives we have observed among organisations that undergo migration projects.

Accelerate innovation

Looking to get more done? Moving to the public cloud will free up your time, enabling you to do what you do best. You'll no longer be tied down by the day-to-day management of your on-premise server, and you will open the doors of data analytics and artificial intelligence to take care of your team's more monotonous, mundane tasks.

Save time and money

We all wish we had more time and more money, right? Moving to the cloud will help you achieve this through a flexible pricing model (meaning you only pay for what you use, when you need to use it), improved efficiencies, and moving from a CapEx to an OpEx model.

Improve security

Your customers want to work with a safe pair of hands. We often see businesses seeking security accreditations and the security and governance products that can be utilised in the cloud go a long way in creating a safer, more compliant organisation. It also provides simple peace of mind, knowing your business is better protected against a growing number of bad actors.

Simplify DevOps

Or are you trying to shorten development cycles? Azure will enable you to streamline DevOps processes and speed up that development for you through the tools available.

Assess the impact of current skillsets

The list of possible drivers behind a cloud migration project is a long one, but one of the biggest factors we've encountered is addressing a lack of in-house resources. In some cases that's because a team is too small, in others it's that they simply don't have the right skillsets.

It's important to really understand your team, where they excel and where you need to need to fill the gaps. Ask yourself:

Do you currently rely on a small IT team which means you lack the necessary skillsets in-house?

Migrating to the cloud means you don't have to worry about having those skills in-house, as your provider will be managing that for you.

Are you looking to free up your IT team's time to focus on some of the more strategic projects?

Having on-premise servers require much more work to keep them up and running from your team, which could prevent them from working on the more strategic projects you want to carry out.

Do you have a business critical application?

And is it supporting your business operations as intended? It's important to ensure that the infrastructure it's running on is suitable to maintain the availability of your app, and if it isn't then moving to the cloud could help rectify this.

Understand the other stakeholder drivers

Moving to the cloud can benefit teams across the business – not just IT. You can start identifying how different stakeholders could benefit from the cloud by identifying their drivers, and what they want for the future of the business.

Who are the main stakeholders?

Understand what stakeholders would be impacted by the migration, and who is most likely to see the greatest value, support the transformation and has the greatest stake in the success of the transformation?

How does IT impact them achieving their business objectives?

Start thinking about their drivers and how migrating would would most benefit them.

Why would they benefit from the cloud?

Are they looking for better security, improved customer facing services, more efficient automation/processes or access to data and insights?

As you're mapping this out you should be considering how you will get them on board with the migration. This will then help you bridge the gap between technical and business conversations later down the line in the 'How do we make it happen' section.

What do you need to consider?

For any successful migration you need to assess what you currently have in place and what you'll need to do with it as part of that move. It's important to take your time at this stage to dive into what you're moving to ensure nothing gets left behind. Things you need to consider are; infrastructure, applications, data, security, your Total Cost of Ownership and your existing Operating Model.

Building an effective business case

Migrating to Azure is no mean feat, and for some stakeholders the indisputable benefits of the move may not be so evident. By bringing everything together in a business case, you will clearly demonstrate the value of moving to Azure and be able to effectively justify the purpose of the migration by evaluating benefits, costs, risks and rationale.

There are several things you need to include to create a successful business case:

SWOT

Risk assessment

Pros and cons

Finance

Outcomes

Trade-offs

Opportunity cost

Business sign-off

Business case considerations

SWOT
Start your plan of by outlining the strengths, weaknesses, opportunities and threats of moving to the cloud. This will help you, and your stakeholders, understand how you can leverage strengths to mitigate threats and leverage opportunities.

Risk assessment
Analysing the risks involved in your project will help you understand how outcomes and objectives may be impacted do to the impact of a risk event. This step will see you put the necessary steps in place to mitigate the highlighted risks.

Pros and cons
It's important to ensure you map out the pros and cons of the project. Be sure to highlight how the migration will impact what they will be working towards. The pros should always outweigh the cons for any successful project.

Budget allocation
Once your project is mapped out, you need to allocate the budget needed to get your migration rolling. Be sure to allocate costs for man power, partner work and your Azure spend.

Outcomes
You may understand what it is you're trying to achieve with a migration, but you need to ensure the wider business does too. Make sure you clearly outline what your business outcomes are as part of this project.

Trade-offs
Often businesses will have a trade-off. This is where you loose value in something, for example hardware, in return for your cloud migration as this hardware will be made redundant. It's important to look at the number of trade-offs needed against the total value of a cloud migration to demonstrate the value.

Opportunity cost
Conversely you should also consider the opportunity cost. This is where you look at the total value of your cloud migration and what the cost is to the company of doing nothing.

Business sign-off
For a successful business sign-off you need to ensure the relevant stakeholders are onboard. This will involve you leveraging their drivers and highlighting how the cloud can support them.

What infrastructure considerations you should make

Your infrastructure is the first thing you need to consider migrating, and a lift-and-shift approach just won't cut the mustard. Here is a simple three-step process you should follow.

Assess

Priority workloads
Start by assessing your highest-priority workloads. Microsoft suggests your team focuses on thoroughly prioritising and documenting the first 10 workloads, so spend some time figuring out what those first workloads will be, and those that will follow.

Top tip
Start considering downtime. Businesses often come to a halt if any applications or infrastructure goes down. Whilst you need to maintain availability during your migration, it's not always easy to prevent downtime. Which is why any major work should be scheduled out of working hours to prevent loss.

Understand

Reusable licensing
What current Microsoft licensing you can reuse to save on future costs?

Reserved instances
Consider each workload you are migrating and how often it will be in use. For those workloads that are needed round the clock significant savings can be made by using Azure reserved instances.

Plan

Governance
Start considering what governance and compliance policies you need to have in place to protect your business. This may be industry led policies or your own internal – this will shape your user and data policies within Azure. For example, ensuring data only resides in a particular region.

Landing Zones
The Landing Zone is the catalyst for a successful migration. We recommend you consider building a Landing Zone when migrating your infrastructure so you can meet the deployment and operation needs of your cloud environment.

What data considerations you should make

"Data is the new gold." The key difference is that everybody's got it. Data is at the heart of your business, it drives your decision making and is incredibly valuable, so it's important to ensure it's migrated safely.

STEP 1
Assess

Current data state
It's important to understand where your data resides, what sources of data you have and its format to ensure you don't lose anything when migrating.

Data Sources
Review your current data sources and where these could reside in Azure. From there you will be able to map your migration path and how this impacts your application strategy.

STEP 2
Understand

Reporting and insights
What Business Intelligent reporting requirements do you have? Factor in what data and you would like to move, and the reporting you would like be able to carry out, and make it's considered within your migration.

Data protection plan
To maintain your data security, take time to understand your access requirements prior to migration, and how these will need to adapt. Your plan should also consider data recovery, including Recovery Point Objectives and Recovery Time Objectives.

STEP 3
Plan

Format requirements
Understand what format requirements are needed, and then cross reference this with the data you currently have. Will you have to make any changes to your current data?

Migration implications
Consider how your data will impact your migration. Will you need to clean up and better manage data to ensure a smooth migration?

Modern data platform
What reporting and insight requirements will you need? Start mapping what data can be pull from your data lake and what your data warehouse requirements are to ensure the data is credible.

THE 5 R^S OF

Application Modernisation

- Rehost
- Refactor
- Rearchitect
- Rebuild
- Replace

How to assess your application

When assessing your applications, you should leverage the 5Rs of application modernisation. These cover the process of evaluating assets to determine the best way to migrate and modernise each asset in the cloud.

After analysing your application, you should have a clear understanding of the best path for migrating your application to the cloud. We've got a blog post that covers everything you need to know about the 5 Rs.

Then you must consider what cloud service model would best fit your application.

Infrastructure-as-a-Service (IaaS)
Do you have a tight budget you need to stick to? If so then IaaS it the most cost and time efficient method. However, this option isn't as cloud native as PaaS and SaaS.

Platform-as-a-Service (PaaS)
Are your applications performing as they should? If not rearchitecting them to PaaS will enable you to have a secure and cost effective platform for your team to focus on building applications and software.

Software-as-a-Service (SaaS)
Do you have any applications that can be completely replaced by a SaaS alternative and not migrated at all? Having a fully cloud-native solution will free up your time to focus on growing your application.

Ensure you have the relevant security measures in place

It used to be the case that security was at the heart of every IT team. Now, it's at the heart of every business. It's critically important to have the relevant security levels set up in the cloud.

Microsoft invests around $1 billion into security each year, so it's worth considering what security features you'll leverage within Azure.

STEP 1
Assess

Current data state
What do you currently have in place and what would you need to implement once migrated? Within Azure they have a tool called Azure Policy where you can view, edit and set custom or regulatory compliance policies.

Role-based access control (RBAC)
What levels of access do different job functions have? RBAC will help you ensure employees are only granted the necessary level of access to perform their job – so no one from marketing will have the same level of access as your IT manager.

STEP 2
Understand

Security tooling
Map out your security requirements to keep your business compliant and secure. Then start mapping out which tooling can you leverage within Azure to deliver this.

STEP 3
Plan

Format requirements
How are you currently monitoring your security? And what would you like to monitor when up and running in the cloud.

Alerting and remediation
How will you manage and respond to any security alerts? Microsoft automatically collects, analyses and integrates log data to detect real threats and reduce false one which will be shown in Security Center along with the information you need to remediate an attack.

What's your Total Cost of Ownership?

Understanding the Total Cost of Ownership (TCO) will help you see the long-term value of the Azure migration.

Now you have assessed what you're going to move, you can then start adding it to the TCO calculator Microsoft has created to help you compare costs and breakdown the estimated savings you can make by migrating your workloads to Azure. Once you've input all of the relevant data Microsoft needs, you will receive an executive summary and supporting details of the analysis of the costs. This will help you gain a clear understating of the costs involved with the migration.

We have assessments that help you identify all the information you need above and as part of presenting that information back to you we help you understand the TCO.

How do you make it happen?

The final step of creating your strategy is planning how you are going to bring it all to life. This involves leveraging Microsoft Programmes, creating a roadmap, identifying business cases and planning for user adoption.

Leverage Microsoft resources

Microsoft has a range of resources available to help support you. Some of which can only be accessed through an Azure Expert Managed Service Provider, like Cloud Direct.

Best practices
Microsoft have created the Cloud Adoption Framework to help you accelerate your migration. The framework is made up of documentation, implementation guidance, best practices and tools. Find out how to use the framework in our beginner's guide.

Resourcing
Microsoft provides a wealth of resources to help customers, including; a skills workshop, a discovery workshops to help your delivery teams understand what they need to do, or even Microsoft engineer time to make your migration as easy to resource as possible.

Expertise
Microsoft have created the Azure Expert MSP programme to help you identify their most capable Azure partners. Every Azure Expert will be dedicated to sharing their expertise to support you at every step of your journey.

Funding
Microsoft wants your migration project to be a success just as much as you do. That's why they provide funding at various stages throughout your migration project, to help keep it moving and to ensure you are making the most of Microsoft's technology. Funding is available for an initial assessment, project planning, creating a proof of concept, and for the migration itself.

Funding is only available when you're working with selected Microsoft partners – like us, for example. If you choose to go directly to Microsoft, you will miss out on thousands of pounds worth of savings and a host of other benefits. It really isn't worth it.

Microsoft Partner
Azure Expert MSP

Microsoft

Did we mention we're an Azure Expert MSP? If you want to find out more about Microsoft resources, then speak to us. We can help you access exclusive Microsoft funding and programs because of our status.

Create a clear roadmap

Now's the time to start mapping what your journey to the cloud looks like. A roadmap will outline everything you need to do to get up and running in Azure. Creating a roadmap will be a way for you to keeping on track of your project and keeping the relevant stakeholders accountable. Most people tend to use a GANTT Chart to create their roadmap.

On the right, we've listed the key things you need to incorporate to create a clear roadmap.

A good Microsoft Partner will help you assess and plan your migration, providing you with all the information needed for your business' plan and roadmap. That's why it's important to work with an Azure Expert MSP.

Schedule of work
The first step in creating your roadmap is creating your schedule of work. This will need to list all the work required within your migration, in of an estimated order of delivery.

Key milestones
Mapping our your key milestones is crucial to keeping your project on track. These would typically include the finalisation of your strategy, moving your first workload and your project end date, among other considerations.

Migration plan
The migration plan breaks everything down into the phases required for you to complete a successful migration. You should then flesh it out with the considerations that follow to make it more actionable.

Resource allocation
This is where you start allocating the resources required by your activities. It's important to consider both your resource availability and the project time, and understand where additional resources may be required.

Project timeline
You probably have a go live date in mind, but you need to complete individual tasks to reach that date. Map out all the key activities on a project timeline so you can clearly see when you need to complete activities to achieve your milestones.

RAG definition
Setting out a RAG definition will provide you with an indication as to how your project is performing.

Cloud Operating Model

When migrating to the cloud, it's important to consider the processes you currently have in place and how they will change once you've migrated. Your cloud migration project does not sit solely with your IT team – it will fundamentally change the way your business operates.

Implementing a Cloud Operating Model is the best way to ensure that your new technology is supporting your business and its processes in the most effective way possible, therefore making the biggest impact on your work and making the biggest possible return on investment.

There's a lot to look at, and potentially a lot of changes to make in order to ensure successful long-term cloud adoption, but it can be broken down neatly into seven key areas of consideration.

People

Technology

Processes

Finance

Governance

Timescales

Strategy

People

Not only will managing your cloud environment require new skills, but those skills will need to be on-hand around the clock. Whether it's late in the day on a Tuesday afternoon or it's the dead of night over the weekend, your cloud environment may present an issue that needs addressing immediately. This is what leads many organisations to opt for a managed service approach, ensuring their new cloud environment is in the hands of the experts.

Technology

Your tools and technologies will change, replacing your restrictive on-premise infrastructure with a network of new compute nodes that open up a world of analytics and innovation. These can be spun up quickly, and in vast quantities, enabling your business to scale in both directions whenever it is required.

Processes

How you manage your suppliers, identities, tickets and data will all undergo change. You'll need to consider your data sovereignty, how you backup and secure your data, and ensure that suppliers and products are compatible with your new operating model.

Finance

Your biggest financial change will be reducing your level of Capital Expenditure and instead focusing on Operational Expenditure, which will scale in line with your business requirements. This reduces your areas of spend while also enabling you to spread payments out across many financial periods.

Security and governance

Gone are the days of a high-trust security strategy. With a network of connected devices and no central data hub, which allows your team to operate from anywhere at any time, adopting a Zero Trust approach will be required to keep your business and its data safe in the cloud. This means you'll "never trust, always verify", rather than making the assumption that access should be granted on the basis of device familiarity, location, or connection.

Timescales

With infrastructure now managed by your Cloud Vendor, your team will be able to adopt new technologies almost instantly and start innovating quicker than ever before. This allows your business to scale up or down when required to react immediately to new market opportunities, conditions or downturns.

Strategy

Your cloud adoption will transform the way your whole business operates, so outlining a plan that integrates with your wider business strategy is a critical step. Identifying and appointing a Cloud Centre of Excellence – a defined, cross-functional group of subject matter experts within your organisation – will ensure that your post-migration business strategy is carefully created, and subsequently curated, to get the most out of your new technologies.

Learn more about Cloud Operating Models by watching our recent webinar, hosted by Cloud Direct's Azure Practice Lead Richard Cheney.

Don't forget to factor in adoption training

Your migration doesn't stop once your infrastructure is in Azure. You then need to ensure it's adopted across the company to reap all the cloud benefits and maximise your return on investment.

Optimisation

Your migration is just the first step of your cloud journey. Once you're up and running it's time for you to leverage the services available to you and optimise your security, IT performance, and costs for your organisation, which will provide you with new capabilities and add further value to the rest of your business

New processes

Now you're in the cloud, the way you'll be working will change. Making your old processes redundant. Make sure you have new processes in place to ensure employees are all singing from the same hymn sheet, otherwise you could be at risk of employees creating their own processes and losing control of things. This is where an effective Cloud Operating Model really comes to the fore.

Employee training

Ensure you have the relevant training in place to ensure employees adopt the new way of working. You can do this by leveraging the available Microsoft training resources, making sure there are different learning paths available – after all, everyone learns differently – and try to break everything down into daily tasks if possible. A great way to boost employee training within your business is by identifying a few champions who will be 'power-users' with a desire to help others adopt the cloud.

What next?

There's a lot to take in, but throughout this guide you will have considered why you want to migrate to Azure, what needs migrating, and how you can go about it – now it's time to take action.

If you're not sure where to start, then let us know. We've been there, done it, and got plenty of t-shirts to show for it. A quick call with one of our expert consultants will help clear things up, applying the migration process to your specific business case and identifying the [Microsoft funding programmes](#) that are available to you.

Go on, what's stopping you?

![Cloud Direct logo]

As one of Microsoft's most-trusted UK partners, Cloud Direct is perfectly positioned to help your business unlock innovation. Supported by an extensive list of accreditations, including being one of the most established Azure Expert Manager Service Providers, we build the foundations that ambitious organisations need to grow, to innovate, and to succeed.

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