



WESTCOAST CLOUD



# MASTERING CLOUD MODERNISATION

with Microsoft Azure



## 01 INTRODUCTION AND SCENE-SETTING

### **We love cloud. We wouldn't have called ourselves Westcoast Cloud if we didn't.**

Why are we such big fans? Because cloud gives businesses the power to reimagine themselves. To completely transform the way they work.

Storing databases, apps, systems and the kitchen sink in the cloud rather than on-premises helps companies to do more with less. It makes them more agile, efficient, secure, innovative, and adventurous.

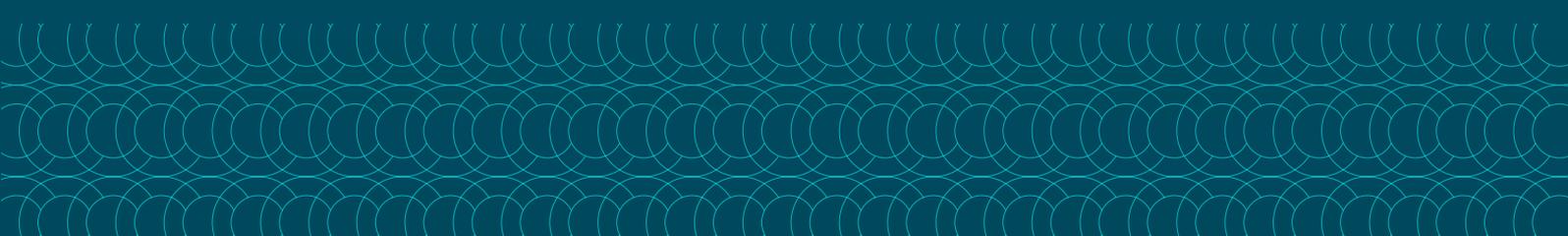
And it's these attributes which give organisations the resilience they need to not just survive challenging times, but thrive.

That's why so many tech companies go on and on about the need to migrate to the cloud with platforms like Microsoft Azure.

And it's true, migration is indeed the first step. But that's all it is, a first step. It's not the end of the road. It's just the beginning.

Once a client's environment has been migrated to the cloud with Azure, it has to be made fit for the cloud.

That's cloud modernisation, and it's what we'll be covering in this guide.



## 02 HOW TO MODERNISE



### CLOUD MODERNISATION

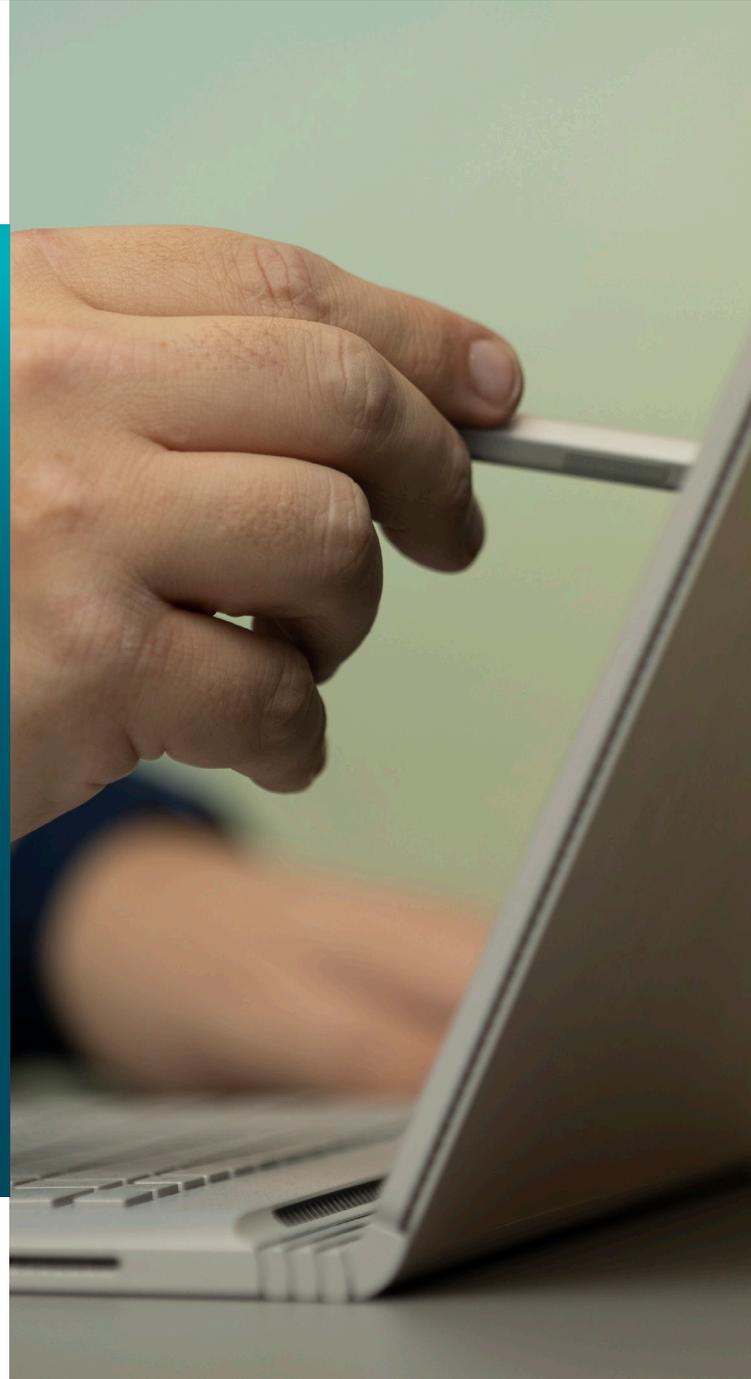
“The process of transitioning an organisation’s applications, processes, and data management to a cloud-first approach in order to improve performance, enhance customer and employee experiences, and accelerate time to market.”



### THE MODERNISATION PROCESS

So, you’ve migrated a client to the cloud with Azure. Great. Now it’s time to help them unlock the full benefit of the cloud. Think efficiency at scale, smaller overheads, and optimised costs.

There are two phases to a modernisation project.



## PHASE 1 BUSINESS ALIGNMENT

**First things first – identify what your client wants from a modernised cloud environment.** Once you know that, you can create a roadmap of how to reach those goals. That's business alignment in a nutshell.

Here's the unabridged, step-by-step process. First, decide with your client what they want to achieve from cloud modernisation.

SOME COMMON TARGETS INCLUDE:



**Facilitate**  
hybrid working



**Get to**  
market faster



**Optimise**  
app costs



**Develop more**  
innovative apps



**Centralise**  
data

Next, identify the workloads you need to modernise in order to reach these goals.

A workload is a collection of IT assets (infrastructure, applications, data, etc.) that support a key part of the business.

**An eCommerce website's workloads might include:**



An app



A database



Payment system

**A factory's workload could include:**



Robots



IoT devices



Servers



**The workloads mentioned in the above eCommerce example could be paired with the goal of developing more innovative apps. And the factory workloads could be paired with centralising data.**

Once you have your modernisation roadmap in place, you're ready for the next step.

Decide how ready your client is to begin a cloud modernisation project. You do this by assessing the financial and technical readiness of each workload you want to modernise.

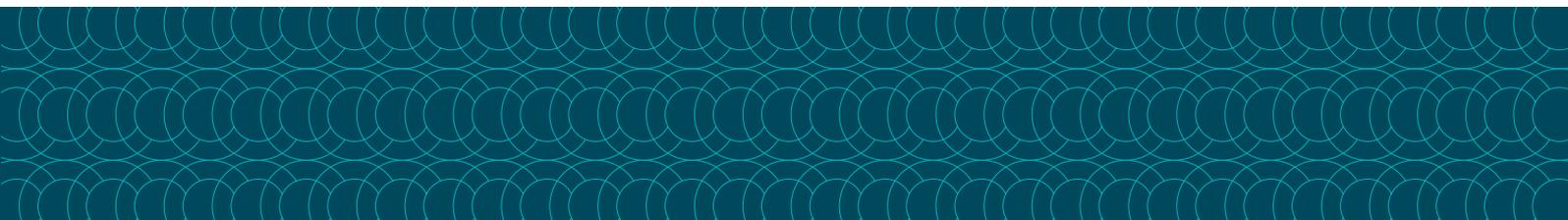
## FINANCIAL READINESS

- Can you quantify the business value of modernising each workload?
- Is the business actively investing in these workloads?
- Do you know what the bill will be for modernising each workload?
- Are these workloads business-critical?
- Is the cost going to impact the desired cost-saving?

## TECHNICAL READINESS

- Do you have enough control over the workload to modernise it?
- Will these modernised workloads need to operate in either a hybrid or a multi-cloud environment?
- Are your workloads portable?
- Do you plan to keep the current architecture?

IF THE ANSWER TO ALL THESE QUESTIONS IS 'YES!', YOUR CLIENT IS PROBABLY READY TO MODERNISE.



The final step of this phase is to ensure everyone involved in the project is fully committed to the route your client wants to take.

The stakeholders you need approval from are typically business leads and technical leads. You'll need to identify them, define their involvement, and demonstrate the value of modernisation.

### TECHNICAL LEADS

Own the modernisation roadmap and present it to the business leads for investment.

### BUSINESS LEADS

Review the modernisation roadmap, understand the ROI, and approve the project.

## YOUR ROADMAP COULD LOOK SOMETHING LIKE THIS:

Business Function	Workloads	Goal	Strategy	Timeline
eCommerce site	Apps	Develop more innovative apps	Process modernisation	N-weeks
	Databases		Application modernisation	
	Payment systems			
Factory production	Robots	Centralise data	Process modernisation	N-weeks
	IoT devices		Database modernisation	
	Servers			



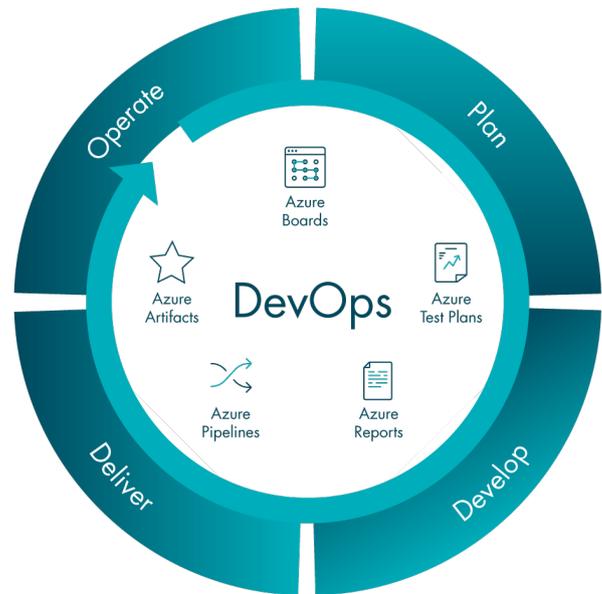
## PHASE 2 MODERNISATION STRATEGIES

If Phase 1 is all about planning, Phase 2 is all about putting that plan into action.

### MODERNISING PROCESSES

The first step is to modernise your client's processes. This is essential if you want maximum value from your project. Use a DevOps approach to speed things up and lower your total cost of ownership.

DevOps methodology keeps things simple, by integrating planning, development, delivery, and operations into a single pipeline. It allows teams across your client's business to identify the biggest priorities and resolve them together. Basically, it's all about focusing on the issues which create the most value, and solving them with the least amount of work.





HERE ARE SOME EXAMPLES OF DEVOPS TOOLS AVAILABLE IN THE AZURE DEVOPS PLATFORM.

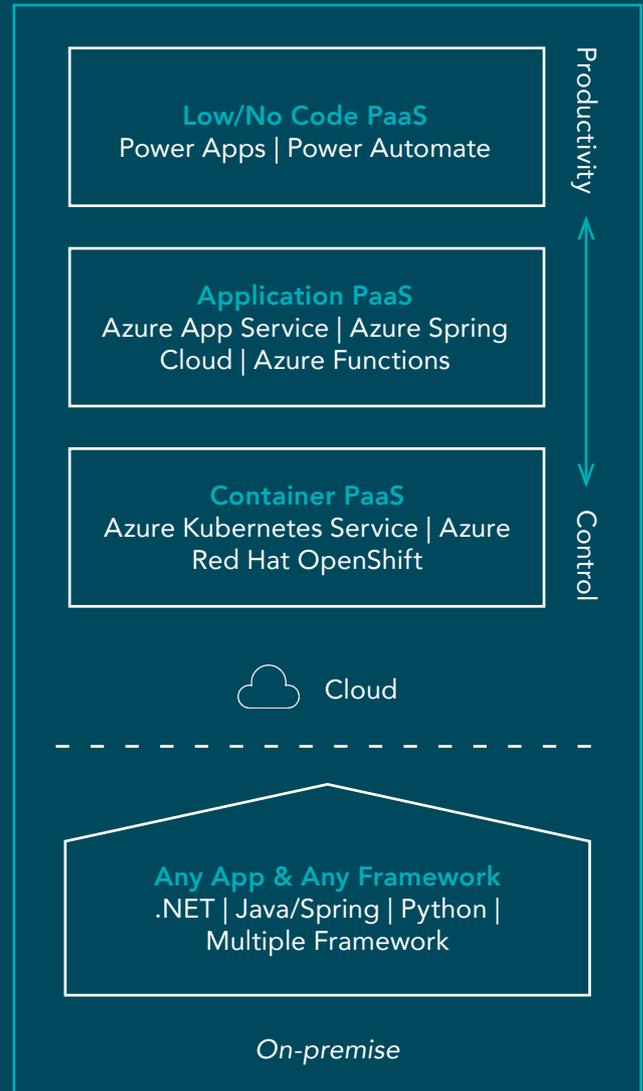
DevOps tool	Description	Azure DevOps solution
Source control	Code repositories for your project	Azure Repos
CI/CD pipeline	Continuously build, test and deploy to any platform or cloud	Azure Pipelines
Task board	Plan, track and discuss work across teams	Azure Boards
Package manager	Share code and publish packages	Azure Artifacts
Test management	Run tests and qualify assurance on code	Azure Test Plans

# MODERNISING APPLICATIONS

With your client's processes modernised, now comes the moment you've been waiting for. It's time to start modernising those applications.

Modern apps can completely transform how a business engages with its employees and customers. Using platform-as-a-service (PaaS) solutions, you can modernise any application or framework, and give your customers the power to scale at will.

You have three varieties of PaaS technologies to choose from, depending on the balance of control and productivity you want.





## CONTAINER PaaS

Solutions which use container technologies to run your clients' workloads. You provide code and manage agent nodes, while the platform manages health, maintenance, and deployment. Examples include Azure Kubernetes Service and Azure Red Hat OpenShift. These solutions give you the most control over your workloads.



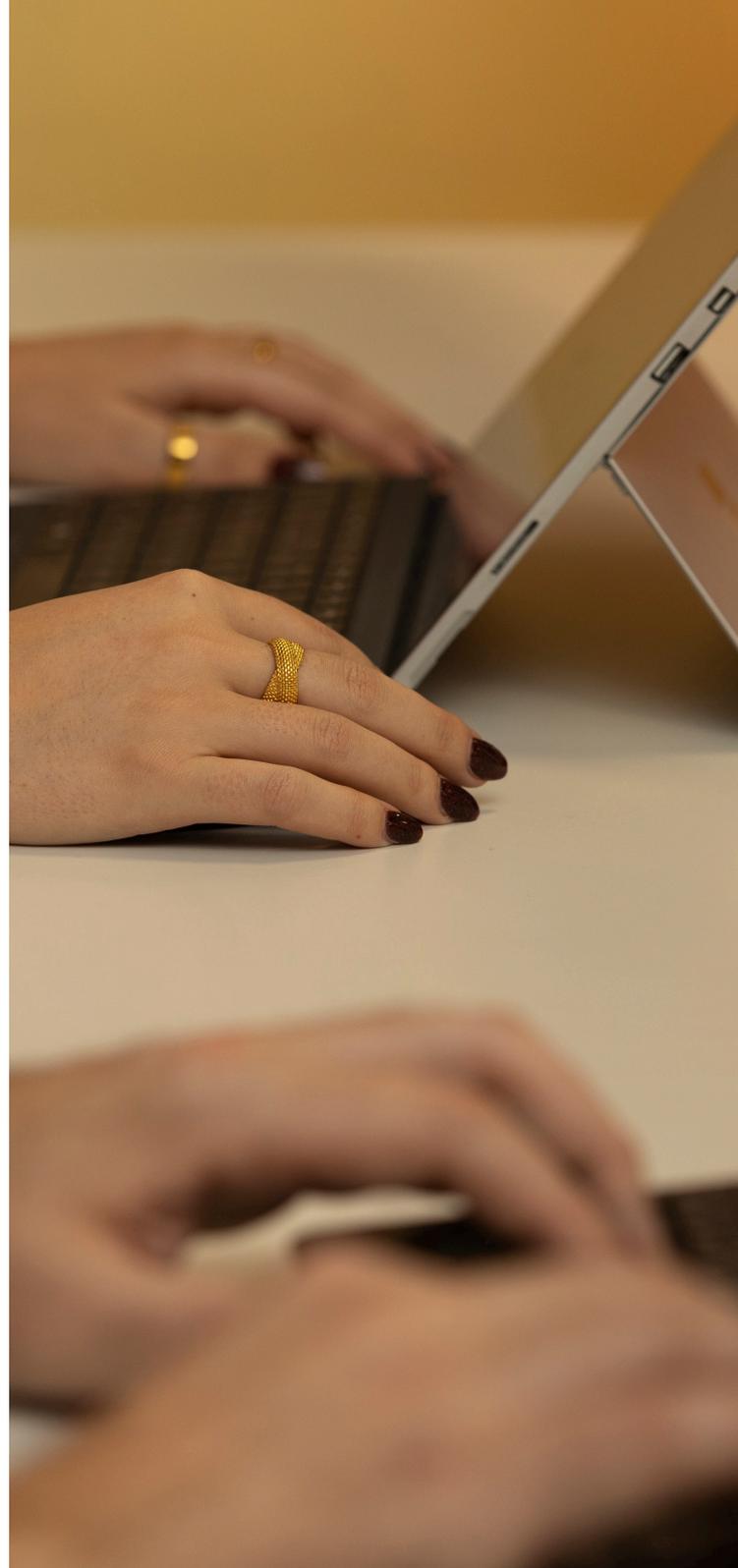
## APPLICATION PaaS

Solutions which use virtualisation instead of containers to run workloads. You provide code and select configuration options, while the platform manages health, availability, and deployment. Examples include Azure App Service, Azure Spring Cloud, and Azure Functions. With less management required than Container PaaS, these solutions offer a balance of control and productivity.



## LOW/NO CODE PaaS

Solutions which let you build apps with little to no coding. Your clients can rapidly build applications and focus more time on their business. Power Apps and Power Automate are examples of low/no code PaaS solutions which maximise productivity.





USE THIS TABLE TO MATCH YOUR CLIENTS' GOALS TO THE RIGHT PAAS SOLUTION.

Control vs. productivity	Business goal	Solution
Most control	Infrastructure control	Azure Kubernetes Service
	Less administrative burden orchestrating clusters and nodes	Azure Red Hat OpenShift
Balance of control and productivity	Focus on developing customer code	Azure App Service
	Automated infrastructure	Azure Spring Apps
		Azure Functions
Most productivity	Faster time-to-market	Power Apps
	Easy to build applications and automation platforms	Power Automate

# MODERNISING DATABASES

A modern database can revolutionise how your clients store, process, and use data. As with app modernisation, adopting PaaS and infrastructure-as-a-service (IaaS) solutions can accelerate and lower the cost of any cloud database modernisation project.

There are two database solution categories:



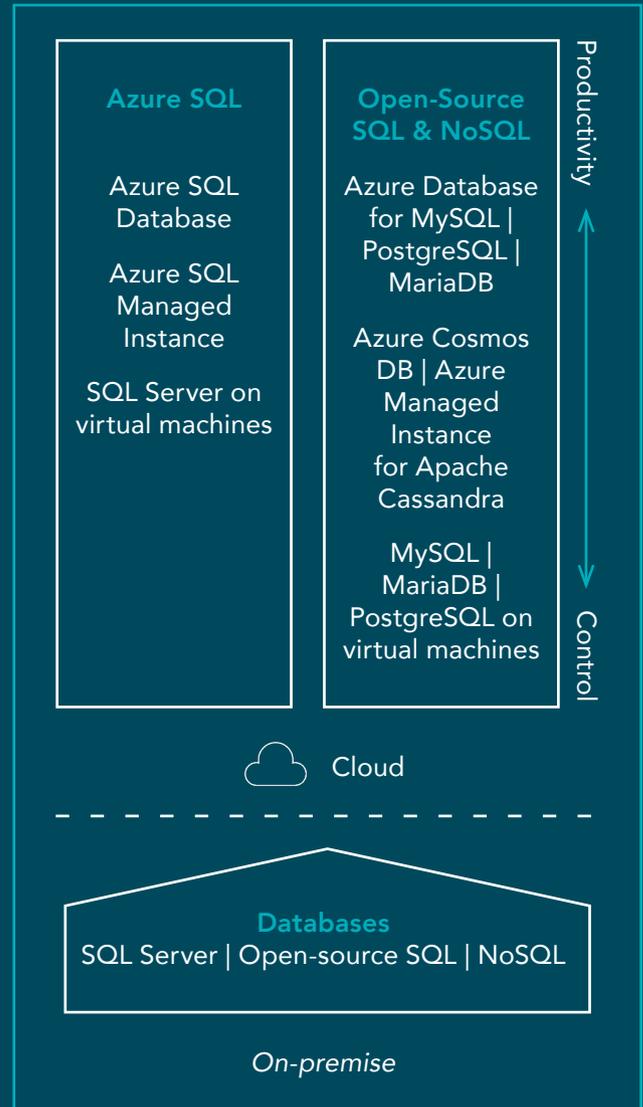
## AZURE SQL

A category of database solutions for SQL Servers and other closed-source SQL databases.



## OPEN-SOURCE AND NoSQL

A category of database solutions for open-source SQL databases and NoSQL databases.



There are two PaaS and one IaaS solutions to choose from in each database category. Each solution offers a different level of control and productivity.



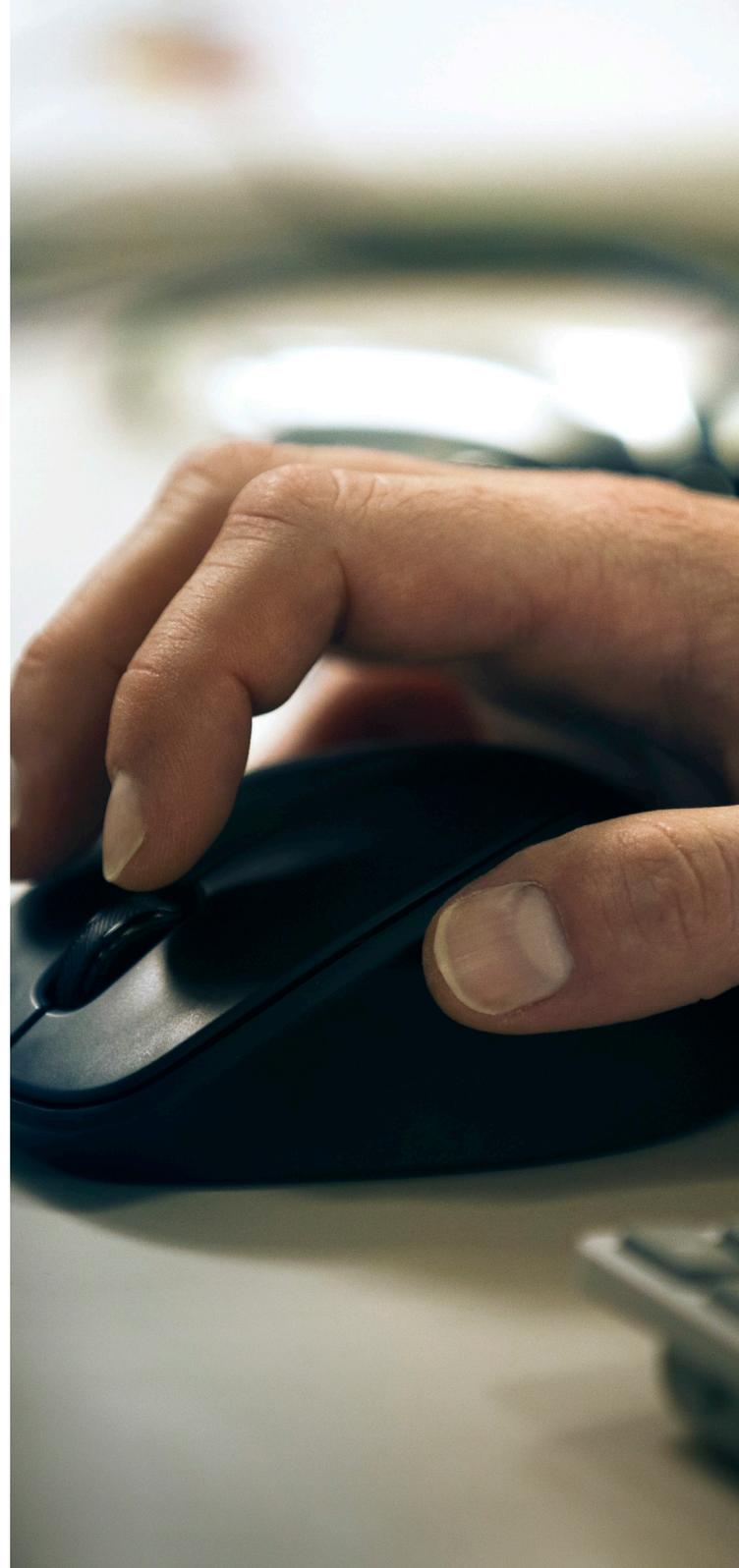
#### AZURE SQL

- SQL Server on virtual machines (IaaS)
- Azure SQL Managed Instance (PaaS)
- Fully-managed Azure SQL database (PaaS)



#### OPEN-SOURCE SQL & NOSQL:

- MySQL, MariaDB, or PostgreSQL on virtual machines (IaaS)
- Azure Cosmos DB and Azure Managed Instance for Apache Cassandra (PaaS)
- Fully-managed MySQL, MariaDB, and PostgreSQL databases (PaaS)



## SQL DATABASES

Here's how to choose the right solution for your database modernisation project.

Control vs. productivity	Business goal	Solution
Most control	OS control Quick modernisation	SQL Server on Windows or Linux virtual machines (VMs)
Balance of control and productivity	Near 100% compatibility with SQL Server (Enterprise Edition) Automated patching Native high availability Instance-scoped features (Service Broker, SQL Server Agent, etc.)	Azure SQL Managed Instance
Most productivity	A multi-tenant SaaS application Elasticity To scale compute independent from storage	Azure SQL Database

## OPEN-SOURCE SQL & NoSQL DATABASES

Control vs. productivity	Business goal	Solution
Most control	OS control Zone redundancy	Open-source databases on virtual machines – MySQL, MariaDB, PostgreSQL
Balance of control and productivity	Hybrid deployment Automated deployment and scaling for Apache Cassandra data centres Automated patching Automated health checks	Azure Managed Instance for Apache Cassandra
Most productivity	A fully-managed NoSQL database Cost efficiency Support for MongoDB and Gremlin	Azure Cosmos DB
Most productivity	A fully-managed SQL solution Cost and performance efficiency Azure Database for PostgreSQL	Azure Database for MySQL Azure Database for MariaDB Azure Database for PostgreSQL



## 03

# HOW TO BUILD A TIMELINE

## CREATING A CLOUD MODERNISATION TIMELINE

**From what you've read so far, cloud modernisation might seem like a purely technical (and let's face it, pretty complicated) project. But from your perspective as a reseller, cloud modernisation is actually more about managing change.**

It's on you to make sure all the stakeholders involved are singing from the same hymn sheet and moving in the right direction to accomplish the business and technical changes your client has asked for.

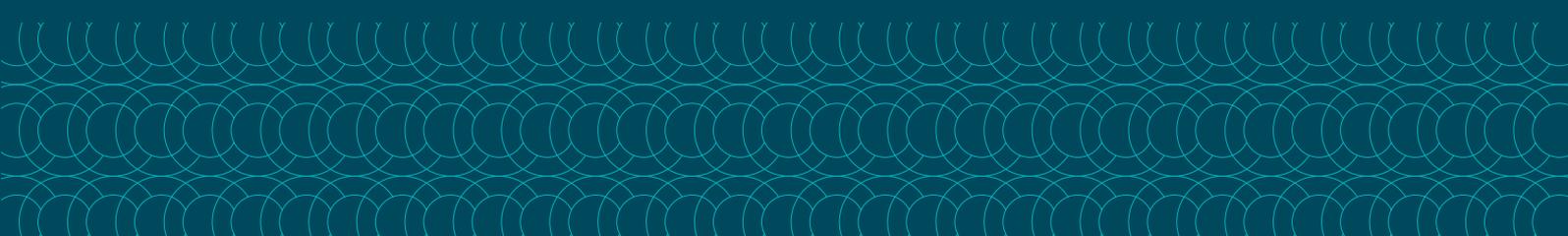
And that's where the challenge lies. If you've been planning out your client's strategy as per this guide, you may notice that their goals, outcomes and financial and technical consideration can sometimes conflict against each other.

It's not uncommon for businesses to have competing goals. And such a situation can limit the change your modernisation project is able to deliver.

Encouraging stakeholders across your client's business to commit to a single goal at a time can help to get around this challenge.

Get every team to work together to support the priority outcome for a defined period of time, then move on. This timeline approach is great for creating unity, clarity and overcoming skills gaps.

In the end, a supportive team-based approach with loosely-defined and agile goals will reach the end faster than the same teams competing with one another for limited resources.





## HERE'S AN EXAMPLE

A business wants to modernise its cloud environment. The stakeholders for this project are spread right across the organisation, and so the goals they wish to achieve are pretty diverse. There are multiple critical business events to address, a need for operational improvements, and innovation opportunities which need to be taken:



### DATA CENTRE EXIT

Pulling out of a data centre requires significant focus from the central IT and cloud adoption teams. The 12 to 18 month time frame is tight but doable, if there are no other distractions.



### OPERATIONAL IMPROVEMENTS

Accelerating innovation requires modernising existing operational systems. It also means modernising the processes dedicated to current production environments.



### INNOVATION EXPANSION

The business wants to continue growing and leading the market through innovation. To do that, it needs to maximise IT investment and reduce existing operational spending.

USING THE ABOVE STRATEGY, HERE'S HOW THIS BUSINESS CAN SOLVE EACH OF THESE CHALLENGES ONE BY ONE.

Project stage	Objective	Time frame	Considerations
Migration and modernisation	Prioritise the data-centre exit with a focus on modern PaaS solutions over a basic lift-and-shift migration.	Months 0–18	The migration as priority should minimise conflicts with existing innovation commitments.
Operation modernisation	Prioritise operational improvements built on cloud-native governance, operations management, security, and compliance capabilities.	Months 6–18	This effort complements and supports the primary migration effort.
Advanced modernisation	With post-migration and operational improvements, the team will have sufficient data and cloud skills to perform deeper modernisation of complex architectures.	Months 18–24	
Innovation and growth	Redirect capital reduction from data-centre exits and new skills in central IT to focus on accelerating continued innovation.	Months 24+	All prior horizons will produce a long list of new innovations as the central IT and cloud adoption teams create tighter collaborations and build out automation assets.

# 04

## HOW TO GET MORE FROM AZURE

### GET MORE WITH AZURE

Microsoft Azure is a family of services designed to help your clients modernise their cloud landscapes.

Using Azure, your customers can reimagine their services, operations, and customer and employee experiences. Build or modernise a whole range of up-to-date, scalable, managed, high-performance apps.

We love Azure for modernisation projects, and you will, too. A recent Economic Impact Report from Forrester found that Azure delivers:



## GET MODERNISING WITH WESTCOAST CLOUD

**So, that's our guide on modernising your clients' cloud environments with Microsoft Azure. We hope you found it useful.**

If you need more support, we have a dedicated Azure team here at Westcoast Cloud. Our Azure Team are pros at showing our partners how they can demonstrate the value of Azure to their customers. This team has both the technical and sales expertise to guide you through Azure Modernisation.



As well as the Azure team, we proudly have an Azure MVP (Most Valuable Professional) at Westcoast Cloud – guiding the Azure Team from a strategic and technical perspective. As a leading name in the Azure community, our MVP would be more than happy to run through anything Azure-related with you.

Get in touch with the Azure team:  
[azure@westcoastcloud.co.uk](mailto:azure@westcoastcloud.co.uk)



If you're looking to grow your own Azure expertise, you can also reach out to our Amplify team. They can take your Azure business to the next level with marketing and implementation support. And they can even help you become a fully-fledged, official Microsoft Solutions Partner for Infrastructure – the title that shows your customers you know your stuff when it comes to Azure.

Get in touch with the Amplify team:  
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