

# Azure Lift & Shift Migration

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# What is Azure Lift and Shift Migration?

Lift and Shift Migration to Azure, also known as “rehosting,” is a strategy where existing applications are moved to Azure with no or minimal changes<sup>1</sup>. It’s like moving a house as-is to a new location. Here’s a brief overview:

**What it is:** Lift and Shift is a straightforward migration approach that involves moving applications, workloads, and databases from an on-premises data center directly to the cloud.

**How it works:** This method uses tools like Azure Migrate, Azure App Service Migration Assistant, Data Migration Assistant, and Azure Database Migration Service to replicate on-premises environments in Azure. It can be done through Agent based/Agent less as per the Customer Agreement.

**Here are some key aspects of Lift and Shift Migration to Azure:**

**Speed and Simplicity:** It’s one of the fastest migration strategies because it requires minimal changes to the applications. You’re essentially copying the existing application to Azure.

**Cost-Effectiveness:** Initially, it can be less costly compared to other migration strategies because it doesn’t require extensive modifications or redevelopment.

**Familiarity:** Your team can continue to use familiar tools and processes, reducing the learning curve and transition time.

**Flexibility:** Once migrated, you can scale your applications to meet demand, leveraging Azure’s scalability features.

**Risk Mitigation:** By not altering the application’s architecture, you minimize the risks associated with complex migrations.

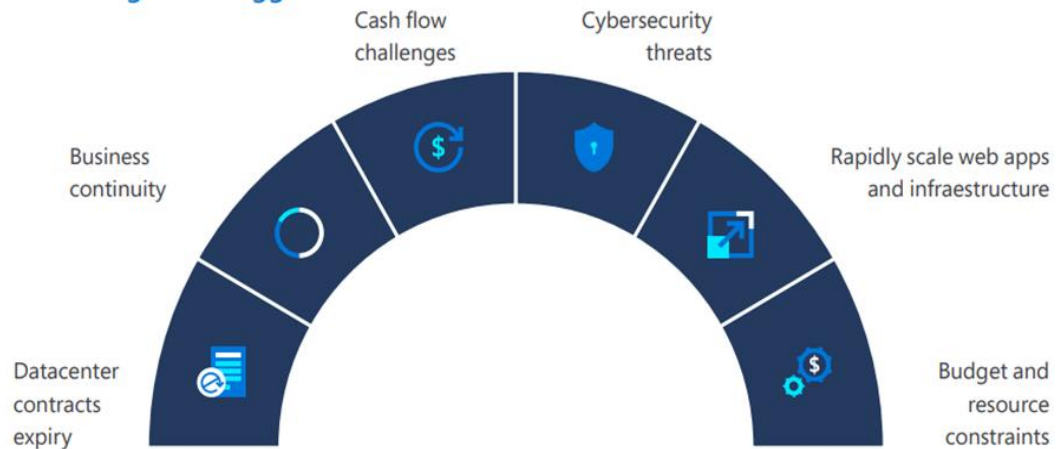
**Operational Continuity:** Lift and Shift allows for minimal disruption to existing workflows, ensuring business operations continue smoothly during the transition.

# Why is Lift & Shift Migration Required

## Challenges faced by existing on-Prem customers?

- Scalability Bottlenecks , Operational Overhead
- Agility Constraints , Security Vulnerabilities
- Disaster Recovery Limitations, Innovation Hurdles
- Performance Challenges , Versioning Concerns
- Integration Issues , Limited Analytics Capabilities
- Compliance Complexities, Vendor Lock-In
- Skill Shortages

### Cloud migration triggers



## How do customers benefit from Migrating Servers to Azure

- Increased Scalability and Flexibility
- Multi-fold operational Efficiency
- Embracing power of cloud Native technologies
- Improved Security Posture
- Ensuring 99.99% of Business Continuity
- Effective integration techniques
- Overcoming Performance Bottlenecks
- Long-Term Cost Predictability & Cost optimization
- Faster and wider Global reach
- Risk Mitigation
- Managing Software Updates and Upgrades
- Navigating Regulatory Requirements
- Avoid Dependency on Specific Technologies
- Democratization of Azure technologies
- AI and ML Integration

These capabilities enhance the overall efficiency and intelligence of database management systems in the cloud.

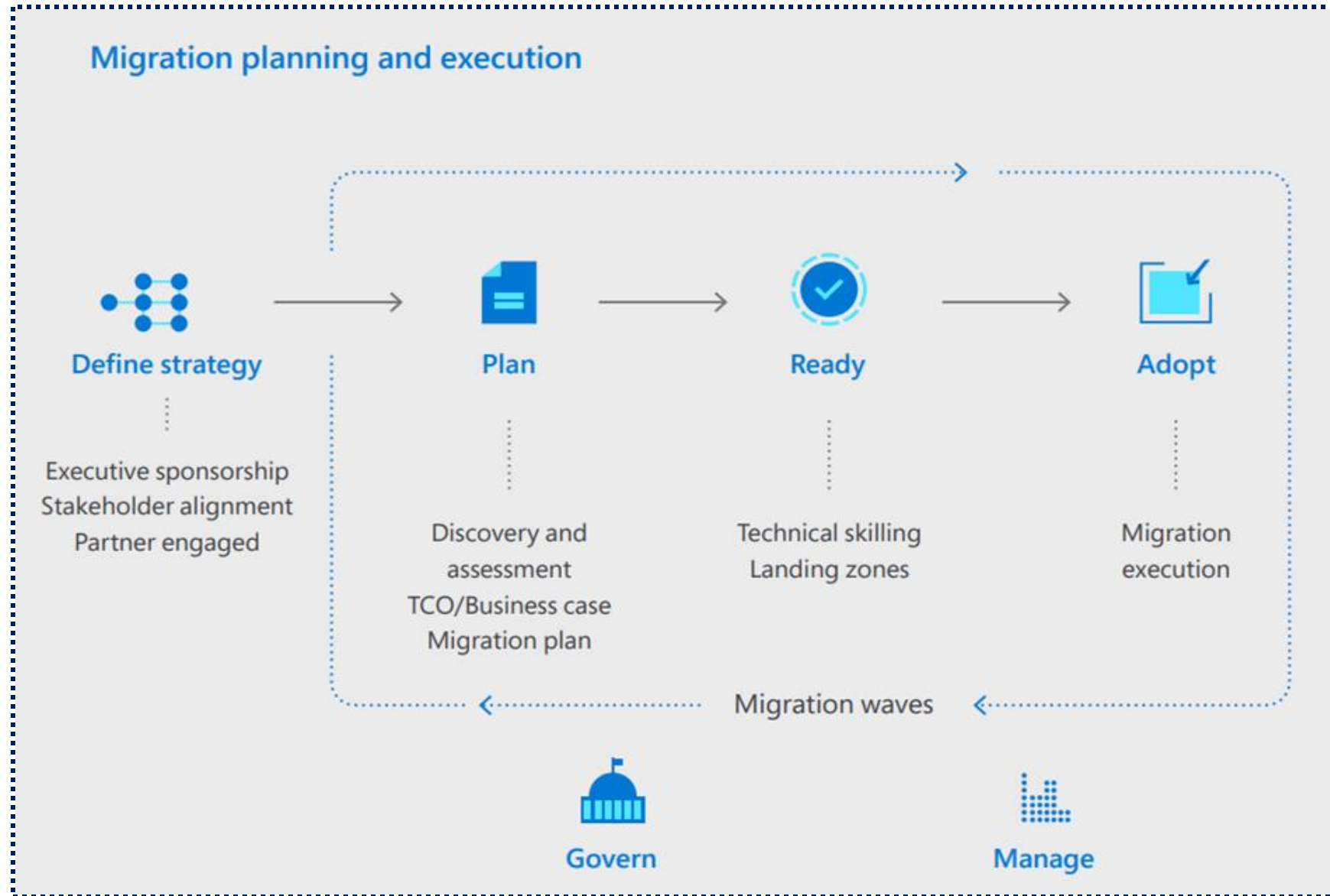
# Azure Migration Focus Areas

## Cloud Adoption Framework (CAF)

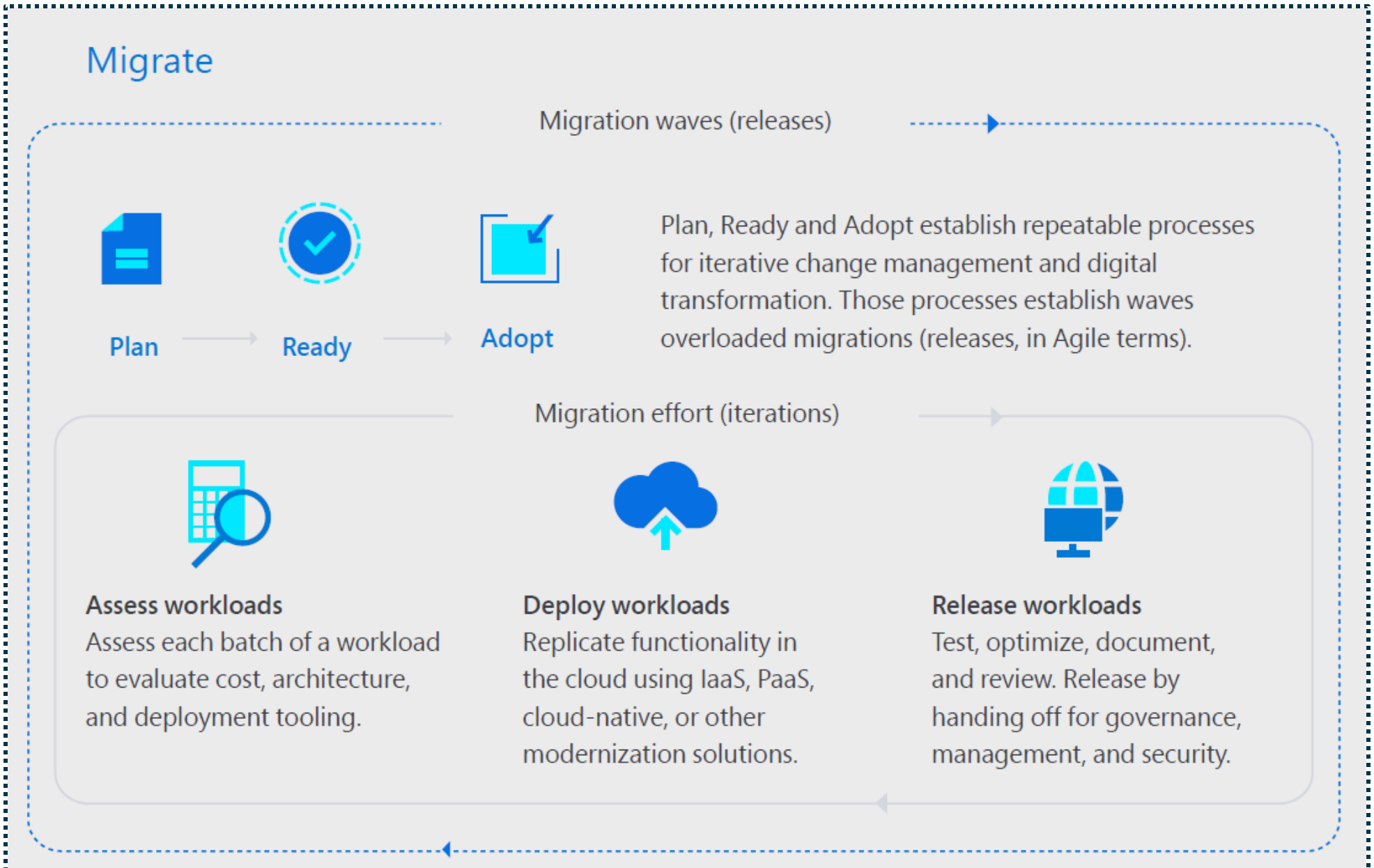
consolidates best practices from Microsoft and others, offering tools and guidance to shape technology and business strategies, driving desired outcomes in adoption efforts.

Each methodology contributes to the cloud adoption lifecycle, supported by the Cloud Adoption Framework (CAF) throughout each phase of the journey.

The framework utilizes methodologies to address common blockers, as depicted in the following diagram.



# Azure Migration Waves and Iterations



# Azure Migration (Cloud Adoption Journey – Phase wise approach)

Migration stages	Sub phases	Tasks Summary
<b>Define Migration Strategy</b>	Define business justification	To facilitate a seamless transition of your on-premises workload to Azure, we will commence by delineating the business imperatives, focusing on cost efficiency, operational enhancement, and regulatory compliance. We will establish SMART objectives and conduct a meticulous evaluation of your digital infrastructure to sequence database migration based on readiness and business significance. Our team will be empowered with Azure-specific skills and training. We will judiciously select a migration strategy for each database, weighing the merits of rehosting against refactoring. Utilizing Azure's analytical capabilities, we will forecast expenses and anticipated returns, while proactively identifying and addressing potential risks. Conclusively, we will formulate a pragmatic timeline and actively involve stakeholders to synchronize efforts and resolve any issues, thereby ensuring a smooth and effective migration to Azure.
	Establish migration goals	
	Assess digital estate	
	Prioritize workloads for migration	
	Plan for skills and training	
	Determine migration approach	
	Calculate costs and ROI	
	Identify risks and mitigation strategies	
	Develop a timeline	
Engage stakeholders		
<b>Migration Plan</b>	Prepare your landing zone for migration	To guarantee a streamlined migration to Azure, we will initiate by setting up an optimal landing zone to back migration endeavors, comprehending the essential components for triumph. Subsequently, we will identify the fitting tools and form an initial migration backlog, informed by your digital estate blueprint, to methodically prioritize tasks. Following this, we will select Azure regions for migration, taking into account compliance and data residency considerations. We will also delineate explicit roles and responsibilities for all stakeholders, project managers, and technical leads engaged in the migration endeavor.
	Prepare tools and an initial migration backlog	
	Select Azure regions for migration	
	Align roles and responsibilities	
	Incorporate skills readiness for migration	
<b>Getting Ready for Migration/ Pre-Migration</b>	Document naming and tagging standards	As part of our commitment to a smooth Azure migration, we will meticulously prepare your landing zone to underpin the migration activities, ensuring all necessary components are in place for success. We will carefully select the most suitable tools and establish an initial migration backlog, informed by our digital estate planning, to effectively prioritize tasks. We will then determine the most appropriate Azure regions for migration, taking into account key factors such as compliance and data residency. Clear roles and responsibilities will be defined for all stakeholders, project managers, and technical leads involved in the migration project, ensuring a well-organized and successful transition.
	Use IaC modules	
	Filter the IaC registry	
	Deploy an enterprise-scale landing zone	
	Set up a data management zone	
	Expand your landing zone with data	
	Build your data management and landing zone	

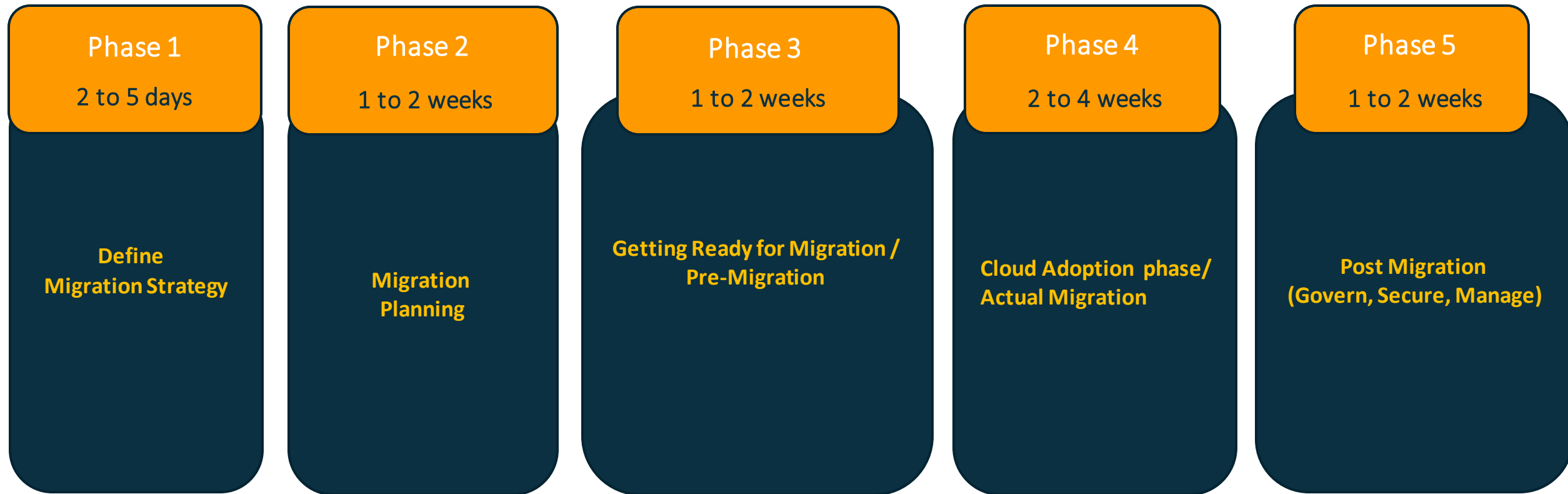


# Lift & Shift Migration to Azure (Cloud Adoption Journey – Phase wise approach)

Migration stages	Sub phases	Tasks Summary
<p><b>Cloud Adoption phase/ Actual Migration</b></p>	Classify workloads	<p>In our pursuit of a seamless Azure migration, we will prioritize the classification of workloads and the assessment of their migration readiness. Our team will design Azure solutions that are both scalable and secure, ensuring the deployment of necessary services. We will also focus on the remediation and replication of databases, maintaining the utmost data integrity. Rigorous testing will be conducted to ensure a flawless transition, with all changes communicated effectively prior to the final migration step. Following the migration, we will engage in cost optimization and retrospective analyses to perpetuate ongoing improvements.</p>
	Evaluate workload readiness	
	Architect workloads	
	Deploy supporting services	
	Remediate assets	
	Replicate assets	
	Prepare for management	
	Test the migration	
	Begin change communication	
	Conduct business testing	
	Complete the migration	
	Optimize costs after migration	
Conduct retrospectives		
<p><b>Post Migration (Govern, Secure, Manage)</b></p>	<p>Assess workloads, Monitor &amp; improve the performance, cost, operational efficiency, Security, Reliability (5 pillars of Well Architected Framework)</p>	<p>As part of the Azure Post Migration phase, we engage in a series of crucial activities to ensure a smooth transition for our customers. we assess workloads for cost, modernization, and tooling, ensuring security by managing traffic and deploying encryption. We monitor resource usage with and replicate workload functionality in the cloud, followed by rigorous testing and optimization for ongoing operation.</p>
	<p>Release Workloads</p>	

# Lift & Shift Migration from On-prem to Azure

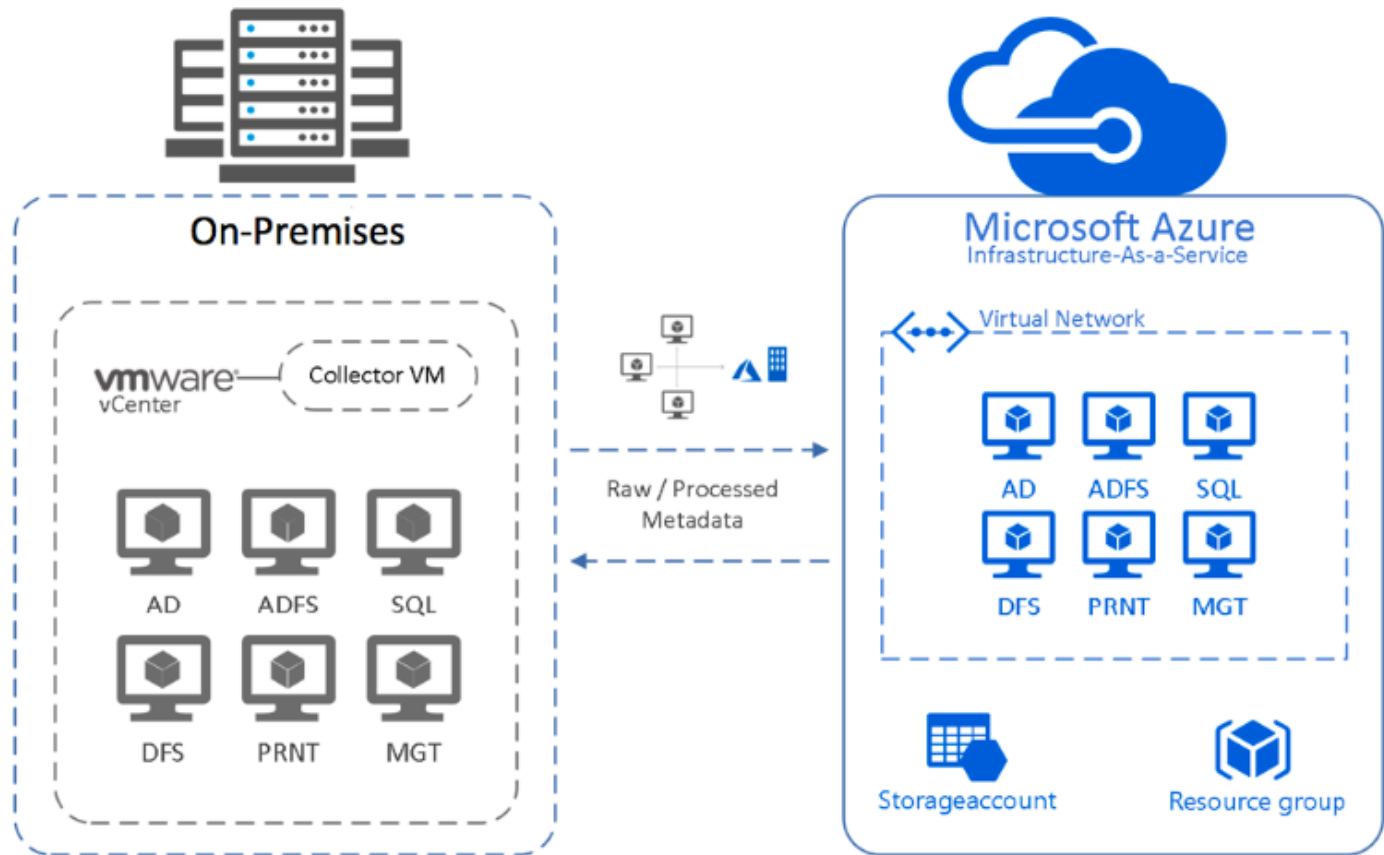
## Saxon's Approach & Timelines



**Disclaimer** : These Timelines vary depending on the Architecture portfolio of the customer's environment , Viz. # of Servers, Workloads, Data volume, Dependencies etc.



# Azure Architecture – Lift & Shift



## Lift and Shift from Architectural perspective?

Lift and Shift is a migration strategy that allows you to “re-host” your existing workload without modifications to the application or redesigning how it is hosted. It’s like picking up what you currently have in your on-premises datacenter and moving it to the cloud.

### How does it work?

A Lift and Shift migration moves an existing server from its current host to its cloud host using tools to replicate what was running in your on-premises solution. This means your databases, configurations, registry settings, and OS configuration are all part of the new deployment on Azure without having to re-write portions of the application to a specific Platform as a Service.

# Saxon's Deliverables of Lift and Shift Migration

## Deliverables

- ✓ **Migration Plan:** A detailed plan outlining the scope, approach, resources, and timeline for the migration.
- ✓ **Infrastructure Assessment Report:** Documentation of the existing infrastructure, applications, and workloads to be migrated.
- ✓ **Cloud Architecture Design:** A blueprint of the target Azure environment, including network, storage, and compute resources.
- ✓ **Security and Compliance Documentation:** Analysis of security requirements and compliance with industry standards in the cloud environment.
- ✓ **Migration Strategy:** A comprehensive strategy for migrating databases, including schema and data transfer plans.
- ✓ **Application Dependency Mapping:** A map of interdependencies between applications to ensure a smooth transition.
- ✓ **Testing and Validation Reports:** Results from pre-migration testing, user-acceptance testing, and post-migration validation.
- ✓ **Disaster Recovery and Backup Plans:** Strategies for data protection, disaster recovery, and business continuity in Azure.
- ✓ **Cost Management Plan:** A forecast of cloud costs post-migration and a strategy for cost optimization.
- ✓ **Training Materials:** Resources to train staff on new Azure tools and processes.
- ✓ **Monitoring and Optimization Framework:** A system for ongoing monitoring, performance tuning, and optimization in Azure.
- ✓ **Post-Migration Review:** A final report evaluating the migration process, lessons learned, and recommendations for future improvements.



## About Us

Saxon is a data and analytics company specializing in industry-specific solutions to make organizations more insights-driven. It helps in empowering clients with actionable information for real-time decision-making, serving as a key solution partner to leading data engineering & Cloud Technology platforms, supporting diverse industries in their digital transformation journey.

Saxon has been the Trusted Partner over 2 decades for holistic business transformation: Industry Insights, Consulting Excellence, and Cutting-Edge Cloud & AI Solutions

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**THANK YOU**

