

INFRASTRUCTURE MIGRATION TO AZURE 10-WEEK IMPLEMENTATION

ABOUT SOFTSERVE

12,000+

ASSOCIATES

Worldwide

30+ YEARS

**ACROSS
MULTIPLE
INDUSTRIES**

20,000+

PROJECTS

For Customers

CTO CENTERS OF EXCELLENCE

CRITICAL SERVICES

Cloud, Application Migrations and Modernizations, DevOps, Governance, Security, Operations & Applications Support

INTELLIGENT ENTERPRISE

Big data, Data Science/AI/ML, IoT, Blockchain, Robotics, Extended Reality AR/VR/MR
GDPR consulting, Technical Due Diligence

PRODUCT MANAGEMENT & BUSINESS ANALYSIS

Product Strategy & Design, Lean Product Management, Business Analysis & Process Design, Operational Efficiency

DIGITAL PLATFORMS

Marketing platform implementation & Optimization such as e.g., Sitecore, Magento, Salesforce, MuleSoft

EXPERIENCE DESIGN

Design thinking, Strategy, Iteration, Delivery, Service Design, Product Design, DesignOps

SOLUTIONS

IT Advisory, Software Architecture and Development, RPA, Performance Testing

INNOVATION

Innovation Strategy with our proprietary platform and our innovation team

RESEARCH & DEVELOPMENT EXPERIENCE DESIGN

Technology incubation, PoC Engineering, Emotional intelligence, R&D Innovation, Feasibility Study, R&D as a Service, Deep Tech Research, Advanced AI, Tech Commercialization

EXTENSIVE DOMAIN EXPERTISE

We are a trusted adviser and provider enabling our clients to build transformative experiences, gain insight from the data, and accelerate business outcomes.

COMPLIANCE STANDARDS



OUR PARTNERS



SOFTSERVE CTO ORG CENTERS OF EXCELLENCE



RESEARCH & DEVELOPMENT

- R&D Innovation
- Feasibility Study
- R&D as a Service
- Deep Tech Research
- Advanced AI



EXPERIENCE DESIGN

- Design Thinking
- Design Research
- Design Strategy
- Product Design
- Service Design
- Design Ops



SOLUTIONS

- Digital Strategy
- Business Analysis
- Product Management
- Architecture
- Performance Testing



INTELLIGENT ENTERPRISE

- Big Data
- Data Science, AI/ML, MLOps
- IoT
- Robotics
- Extended Reality (AR / VR / MR)
- GDPR
- Blockchain
- Technical Due Diligence



PLATFORMS

- Salesforce
- Sitecore
- MS Dynamics
- AEM
- EPiServer
- MuleSoft
- Magento
- Dell Boomi
- Shopify
- Drupal



CRITICAL SERVICES

- Cloud & DevOps
- Security & Governance
- Operations Support
- Application Support



INNOVATION

- Innovation Strategy
- Innovation Platform

MIGRATION AND MODERNIZATION

Modernization is where you enhance existing applications to improve operations, increase efficiency, maximize developer velocity, and minimize cost.

With minimal effort, our proven migration approach, based on experience and industry standards, allows achieving modernization goals.

WE PROPOSE:

- Legacy applications re-architecture
- Application portfolio modernization
- Cloud-native applications development
- Modern application development transformation



CLOUD ADOPTION & MIGRATIONS

Cloud Adoption provides numerous business, technical and organizational benefits.

Utilizing Azure according to best practices, well-known standards, and frameworks allows unblocking all cloud possibilities to build solid, reliable, cost-effective modern solutions.

WE PROPOSE:

- Briefing sessions
- Assessment and discovery
- Build Azure Cloud Strategy
- Migration Factory
- Cloud Optimization
- Consulting and advisory

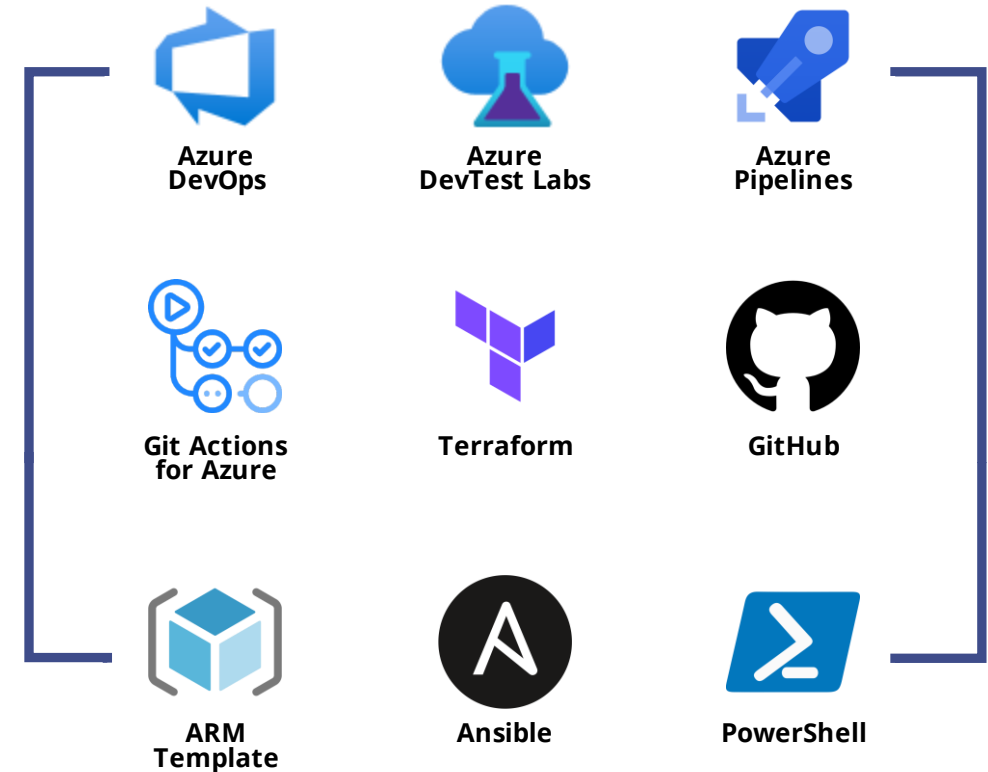


DEVOPS & AUTOMATION

DevOps & Automation is a progressive choice for the success path of modern business. Everything as Code approach opens new benefits like having highly repeatable tasks, scaling operations easily, reducing the risk of human error, tracing the steps, and much more.

WE PROPOSE:

- Design and implementation
- Migrations to Azure DevOps and GitHub
- Infrastructure as Code
- DevOps processes optimization
- Automation and tooling development
- DevSecOps adoption



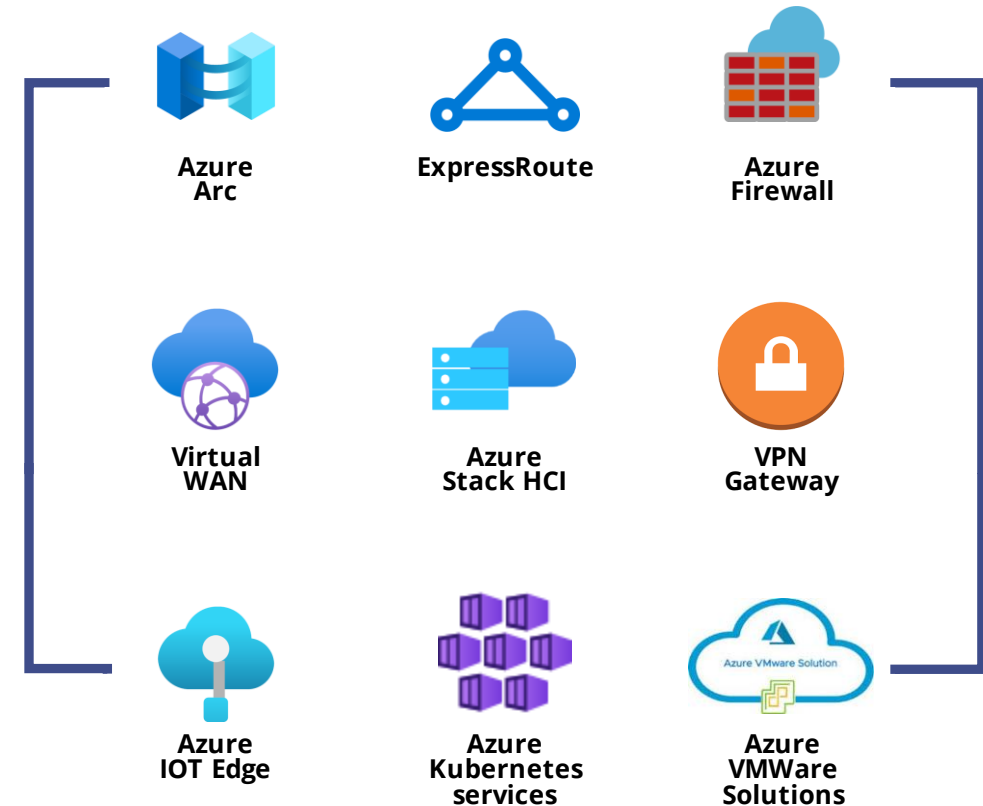
HYBRID, EDGE & MULTICLOUD

Cloud-managed edge computing devices bring the computing power of the public cloud to the private cloud. Working with this direction, you can leverage the power of new services:

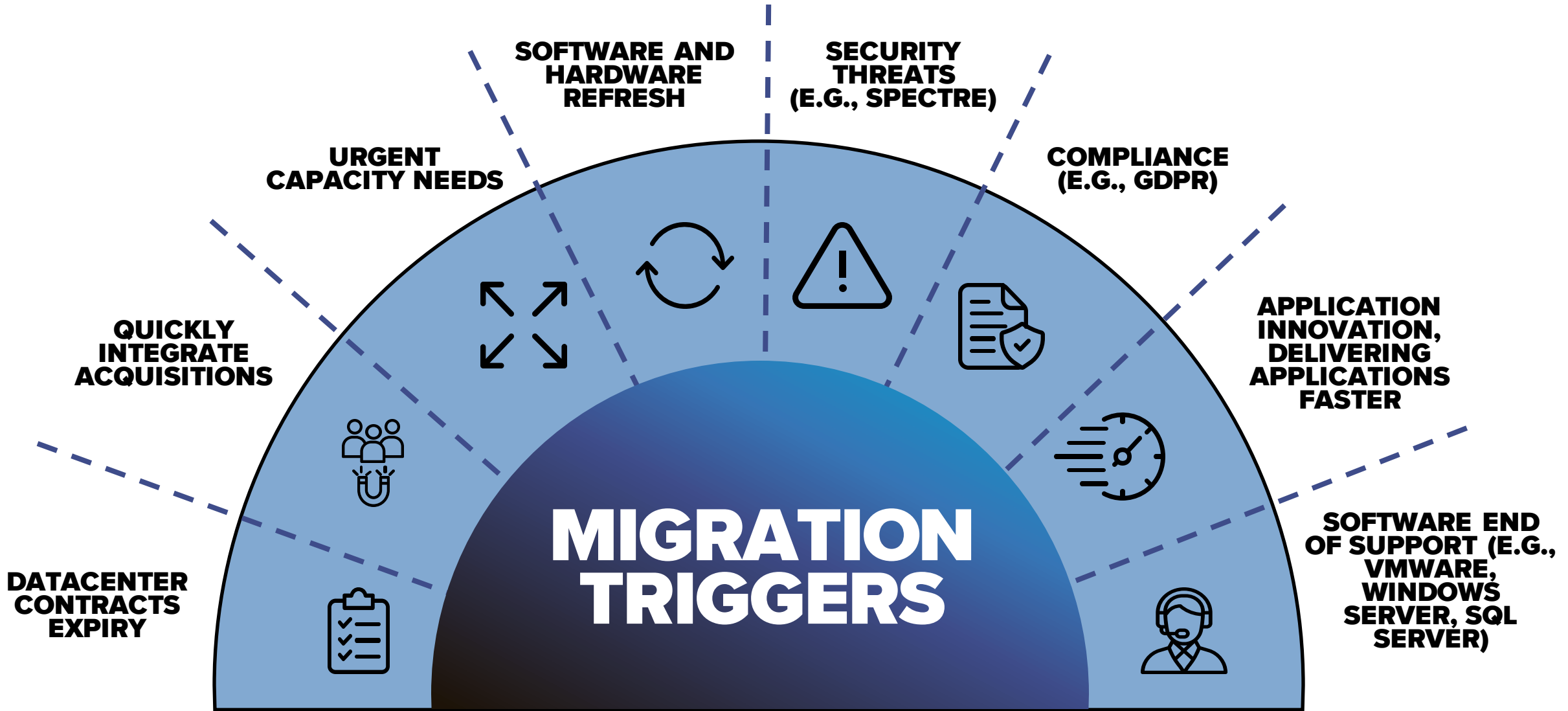
- Azure Arc
- Azure Stack HCI
- Azure VMWare Solution

WE PROPOSE:

- PoC and workshops
- Design and implement Hybrid solution
- Build Multi-cloud strategy
- Azure Hybrid services integration



THE ESSENCE OF INFRASTRUCTURE MIGRATION



MIGRATION JOURNEY



ASSESS



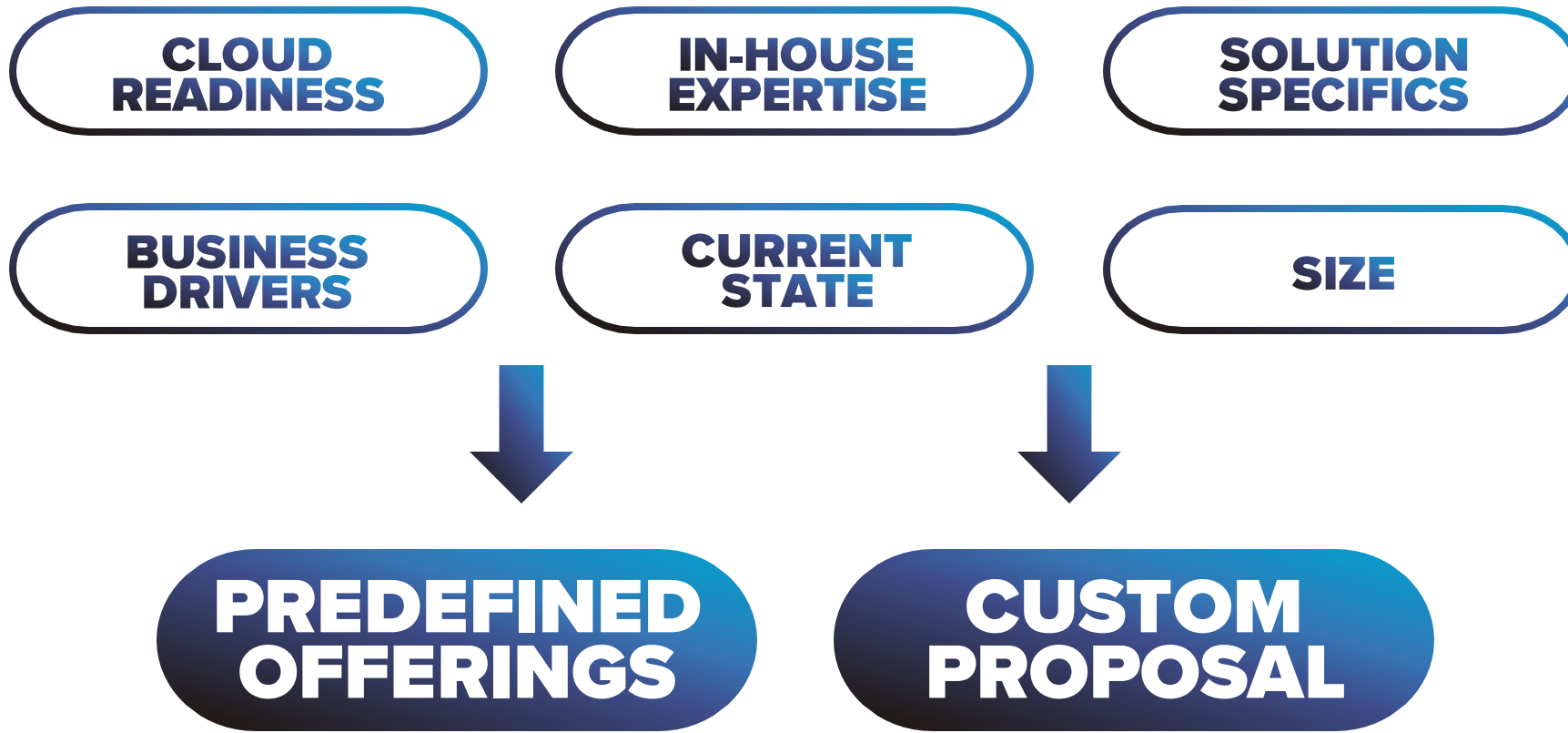
MIGRATE



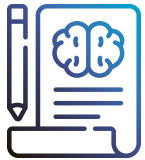
OPTIMIZE

ASSESSMENT OPTIONS

INPUT REQUIREMENTS



ASSESSMENT PROCESS



PLANNING

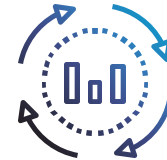
Prepare for an assessment and identify business goals and objectives

1 – 2 weeks*



DISCOVERY

Get a clear picture of the current state of the solution



ANALYZING

Analyzing the mix of business goals, input requirements, current, and future state

Up to 1 week*



ACTION

Create a migration plan, and final assessment report and present them

Up to 1 week*

* Estimates are valid for generic middle-size solutions and can be parallelized or shortened based on the client needs

ASSESSMENT TOOLS



Azure Migrate

01

Azure Migrate

Azure Migrate provides a simplified migration, modernization, and optimization service for Azure. All pre-migration steps such as discovery, assessments, and right-sizing of on-premises resources are included for infrastructure, data, and applications.



02

CAST Highlight

CAST highlight provides automated source code analysis of hundreds of applications in a week for cloud readiness, open-source risks, resiliency, and agility. Objective software insights are combined with qualitative surveys for business context.



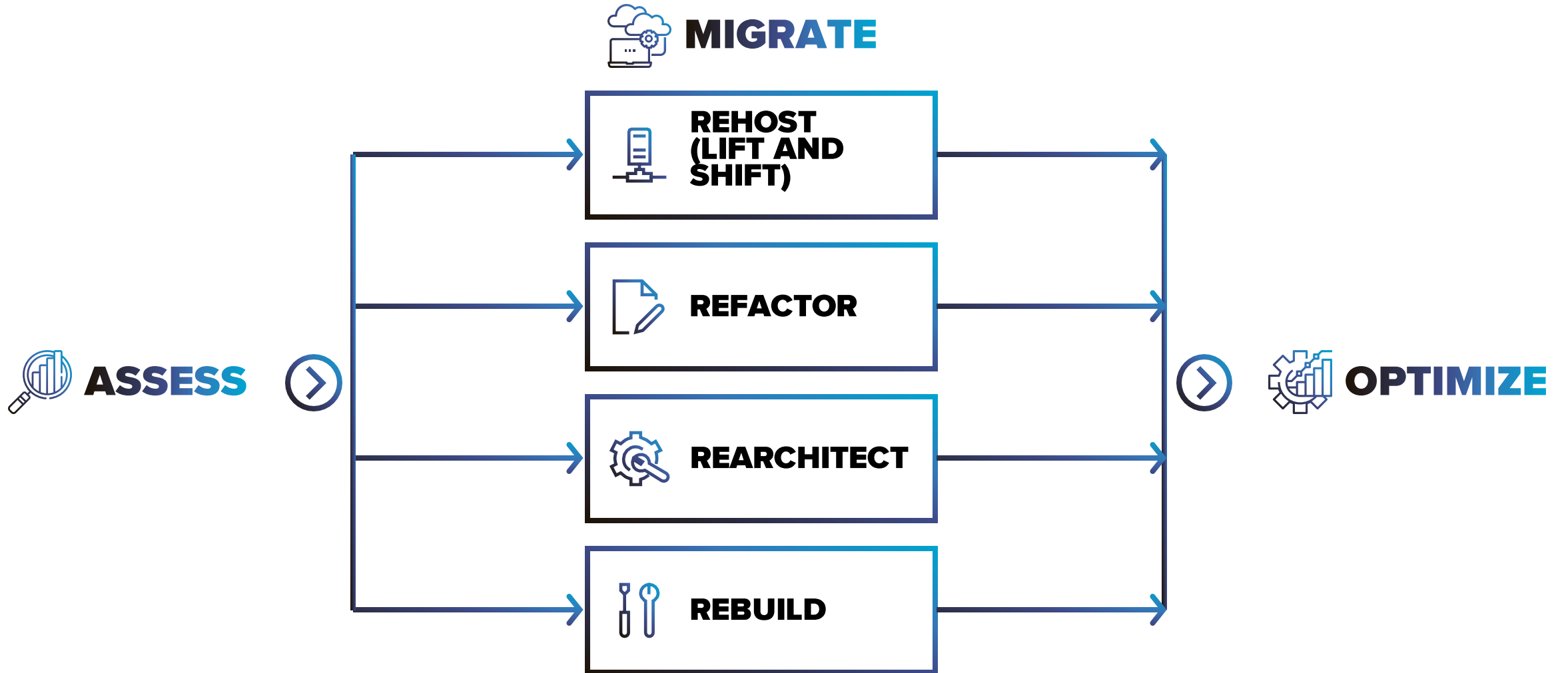
CloudPilot

03

CloudPilot

Based on static code analysis, configuration data, and development team interaction, CloudPilot provides a deep and detailed analysis of applications and their readiness to migrate to a cloud environment. CloudPilot assists in the initial assessment of the cloud migration effort.

MIGRATION OPTIONS



MIGRATION STRATEGY: REHOST



REHOST (LIFT AND SHIFT)

WHAT IS IT?

Redeploy an existing application to a cloud platform without modifying its code. The application is migrated “as is”, which provides baseline cloud benefits without the risk or costs of making code changes.

WHAT DO WE OFFER

- Lift and shift migration to Azure Cloud
- Move to Azure VMWare Solutions
- Migrate to Azure Stack HCI



REFACTOR

WHEN TO USE?

- Need to quickly move applications from on-premises to the cloud (e.g., datacenter contract expiry)
- When the application is needed, but evolving its capabilities isn't a business priority
- For applications that are architected to leverage Azure IaaS scalability
- Specific application or database requirements that can only be met by Azure VMs



REARCHITECT



REBUILD

EXAMPLE

Move a line of business application to Azure VMs

INFRASTRUCTURE MIGRATION TO MICROSOFT AZURE

WHY AZURE MIGRATION



**IMPROVED
OPERATIONAL
EFFICIENCY**



**TRANSPARENT COST
MANAGEMENT AND
COST OPTIMIZATION**



**ABILITY TO SCALE
APPLICATION ON
DEMAND**



**ABILITY TO DEPLOY
APPLICATION WORLD
WIDE**



**MICROSOFT-DRIVEN
SECURITY AND
COMPLIANCE
VALIDATION**



**DISASTER RECOVERY
AND FAULT TOLERANCE
FOR BUSINESS
CONTINUITY**

INFRASTRUCTURE MIGRATION



EXAMINING THE CURRENT PROCESS

exploring the state of the current DevOps processes, highlighting the business needs, analyzing functional and non-functional requirements, and defining the key DevOps metrics to be improved, preparing reference Azure DevOps project



REVIEWING THE CURRENT ARCHITECTURE DOCUMENTATION



PROVIDING SPECIFIC GUIDANCE

to improve the current DevOps metrics and implement the latest best practices



DEFINING & BUILDING

the overall DevOps strategy

EXECUTION APPROACH

PLAN

WEEK 1-2

- The existing on-prem infrastructure analysis to identify migration readiness
- Migration plan preparation, including timelines, resource allocation, and risk management strategies
- Tools and Technologies Selection

PILOT

WEEK 3-4

- Azure cloud environment preparation
- Pilot Migration: Conduct a small-scale migration to test the process and tools
- Establish performance benchmarks to compare pre and post-migration performance

PREPARATION

WEEK 5-6

- Test data migration to Azure
- Migrate application VMs lift-and-shift to the cloud, ensuring they are functional in the new environment
- Ensure all interdependencies are correctly mapped and functioning
- Migration of lower environments to Azure

MIGRATION

WEEK 7-8

- Implement Azure cost management practices to optimize cloud spending
- Review and enhance security measures in the cloud environment according to the client's security requirements
- Migration of upper environments to Azure

FINALIZATION

WEEK 9-10

- Ensure that all systems operate as expected in the Azure environment.
- Provide comprehensive documentation and knowledge transfer sessions for the client's IT team.

MIGRATION OVERVIEW



PROJECT SPECIFICATIONS

- Remote execution
- Project timeline: **10** weeks
- Budget: **\$100 K**



TEAM COMPOSITION

- Certified Azure Solutions Architect from SoftServe
- DevOps Engineer from SoftServe
- Business and Technical stakeholders from the Client



DESCRIPTION

Migration to Azure: SoftServe's 10-week implementation is designed to seamlessly transition your on-prem infrastructure to a fully optimized Azure environment, ensuring operational continuity, cost efficiency, and enhanced security with ongoing support and training of the IT operations team.

At the end of the migration, you will have:

- The workload is successfully shifted from on-premises infrastructure to the Azure Cloud environment.
- Applications and data are fully operational in Azure with performance and security measures in place.
- An optimized Azure setup to maintain cost-effectiveness and high performance.
- A robust security posture within Azure aligned with best practices and compliance requirements.
- Comprehensive documentation detailing the new cloud architecture.
- IT team is capable of managing and operating within the Azure environment.
- Post-migration support to ensure a smooth transition and to address any immediate operational issues.

INFRASTRUCTURE MIGRATION DELIVERABLES

DELIVERABLES:

- **Architecture Assessment report:** An in-depth analysis of the current infrastructure and how it will be mapped and optimized in Azure.
- **Architecture Solution Document:** A finalized architectural blueprint detailing the implemented cloud solution, including infrastructure, services, and security protocols.
- **Detailed Migration Plan (WBS):** A document outlining the step-by-step process for migration.
- **Operational Documentation and Training Materials (optional):** User manuals, system administration guides, and training resources for the client's IT team to manage the new cloud infrastructure.
- **Migrated infrastructure to Azure**

The screenshot displays the Azure Migrate console interface. The main heading is "Azure Migrate | Servers, databases and web apps". The left sidebar contains navigation options: "Get started", "Explore more", "Migration goals" (with "Servers, databases and web apps" selected), "Manage" (with "Discovered items" and "Properties"), and "Support + troubleshooting" (with "Diagnose and solve problems" and "New support request").

The main content area is titled "Azure Migrate: Discovery and assessment". It includes a search bar and action buttons: "Create project", "Refresh", and "Feedback". Below this, there are tabs for "Discover", "Build business case", "Dependency analysis", "Assess", "Overview", and "Resolve issues".

The "Discovery and assessment" section shows a summary of discovered servers:

Discovered servers	OS distribution	Total migration business cases	Groups
35	Windows: 19	0	4
Servers running SQL Server: 5	Linux: 0	Assessments: 4	Appliances: 2
Web servers: 0	Unknown: 0	Total: 4	
	Dependency analysis progress: 0 Servers / 35 total	Azure VM: 1	
		Azure SQL: 3	
		Azure App Service (Preview): 0	
		Azure VMware Solution (AVS): 0	

A "Next step" message reads: "Refine your application grouping with dependency analysis or start migrating your servers." A link "Add more assessment tools? Click here." is provided.

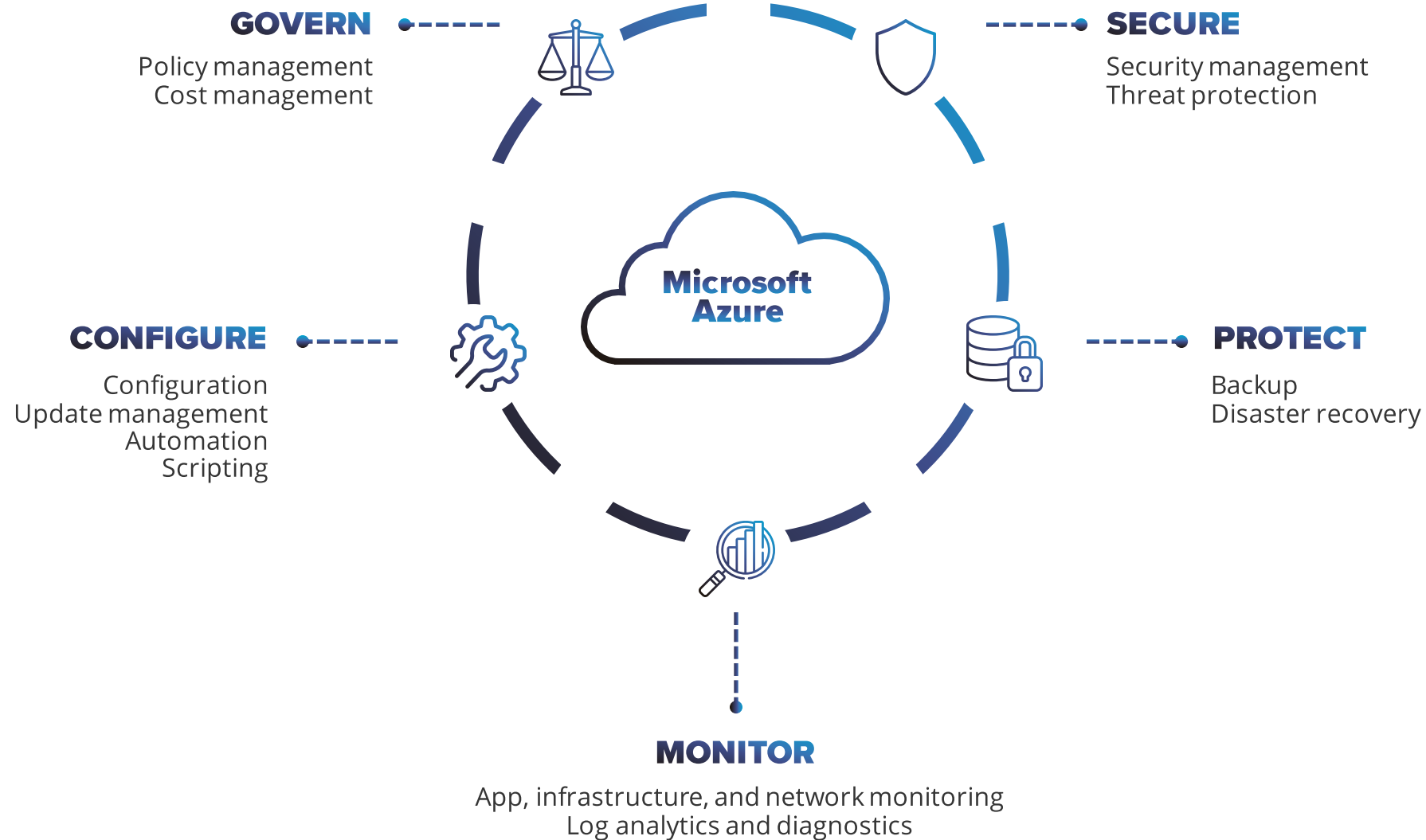
The "Migration tools" section is titled "Migration and modernization" and includes tabs for "Discover", "Replicate", "Migrate", and "Overview". It shows the following summary:

Discovered servers	Replications	Test Migrations
35	Azure VM: 5	0
Discovered apps: ASP.NET: 0, Java: 0	Azure App Service code: 0, Azure Kubernetes Service (AKS): 0	Migrations: 6

A "Next step" message reads: "You can start migrating the replicating servers and web apps to Azure".

NEXT STEPS

SOLUTION OPTIMIZATION



OPTIMIZE



OPTIMIZE

WHAT IS IT?

After a successful migration, the workload will be handed off to the managed services team. Here, a whole new set of services such as monitoring, patching, cost optimization, and support offer additional revenue and differentiation opportunities.

WHEN TO USE?

- Need to decrease cloud costs or increase the performance of the solution in the cloud
- Improve client satisfaction by enabling continuous monitoring and fixing bugs and problems in advance
- Meet industry best standards and Microsoft Azure Well-Architected or Cloud Adoption Framework

EXAMPLE

Implementing the Infrastructure as Code approach for deployment environments to decrease the time for provisioning new environments and minimize human-related errors.

WHAT DO WE OFFER?

- Cost optimization
- Performance testing
- Security assessment
- Continuous Monitoring enablement
- Governance assessment
- Chaos Engineering
- Everything as Code automation
- Disaster Recovery implementation

**FOR
THE
FUTURE**