AWS to Azure Migration

SAXON

What is AWS to Azure Migration?

AWS to Azure Migration involves moving workloads, applications, and data from Amazon Web Services (AWS) to Microsoft Azure. The process includes assessing your current AWS environment, mapping equivalent Azure services, estimating costs, setting up Azure resources, choosing data migration strategies, testing the Azure environment, minimizing downtime during cutover, optimizing post-migration, and managing ongoing challenges.

Key Aspects of AWS to Azure Migration :

Assessing Your Current AWS Environment: Evaluate existing AWS resources, architecture, security policies, and system performance. Catalog virtual machines (EC2 instances), storage volumes, networking components, and databases. Gather information on usage analytics, costs, and configurations.
Planning Your Migration: Compare costs between AWS and Azure. Consider security, compliance, and workload priorities.
Setting Up Azure Environment: Create Azure resources (VMs, storage, networking, etc.). Configure security settings and network components.
Data Migration Strategies: Choose the appropriate migration method (lift-and-shift, re-platforming, or re-architecting). Migrate data from AWS storage services (like S3, EBS) to Azure equivalents (like Blob Storage, Managed Disks).
Testing and Validation: Test your Azure environment to ensure compatibility and functionality. Validate data integrity after migration.
Executing the Migration: Minimize downtime during cutover by carefully planning the transition. Move workloads from AWS to Azure.
Post-Migration Tasks: Optimize Azure resources for performance and cost. Update DNS records, security groups, and other configurations.
Managing Post-Migration Challenges: Address any issues that arise after migration.

Why is AWS to Azure Migration is required ?

Pay less with Azure

Higher performance and lower TCO for running SQL Server in the cloud.

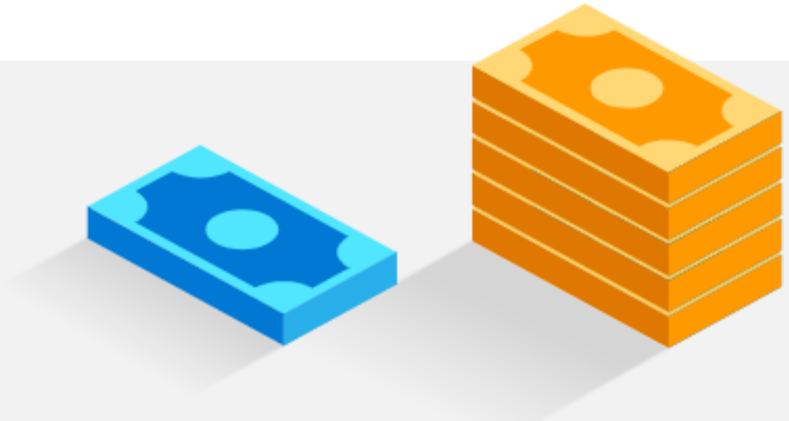
Simple, familiar SQL Server for versatile virtual machines.

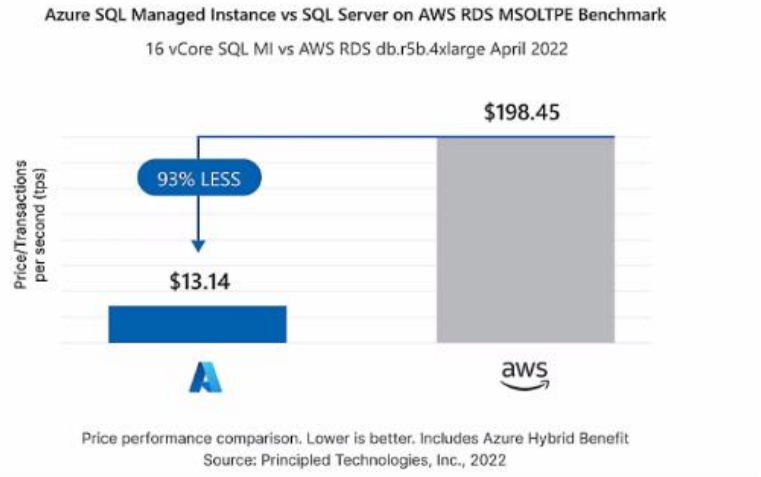
Robust, simple high availability/disaster recovery (HA/DR) with Always On availability groups.

Built-in security and management with automated security updates and simplified configuration management.

Get higher performance and lower TCO

SQL Server on Azure Virtual Machines performs up to 42 percent faster and is up to 31 percent less expensive than AWS EC2[1]. Migrate on-premises SQL Server licenses to the cloud at no additional cost with Azure Hybrid Benefit. Migrate your SQL Server workloads to Azure and get free Extended Security Updates for SQL Server 2008, 2008 R2, and 2012, only in Azure. Taken together AWS is up to five times more expensive than Azure for Windows Server and SQL Server[2].





Get superior performance at a lower cost for modernized workloads

Meet your mission-critical requirements up to 5 times faster while paying up to 93 percent less than with AWS RDS.* Learn how Azure SQL Managed Instance—an intelligent, fully managed cloud database service—outperformed across three different benchmarks, spanning transactional and analytics workloads.

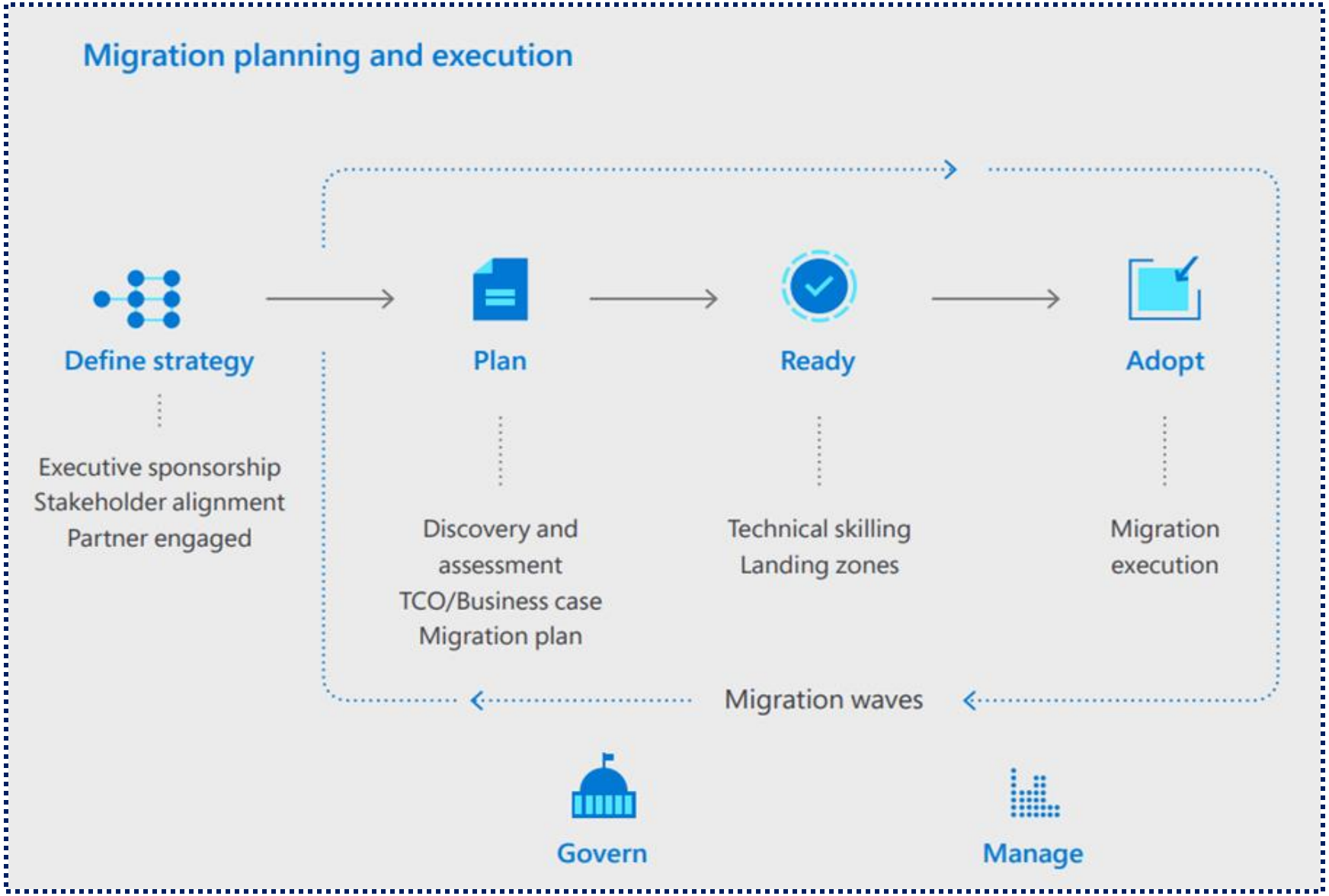
Azure Migration Focus Areas

Cloud Adoption Framework (CAF)

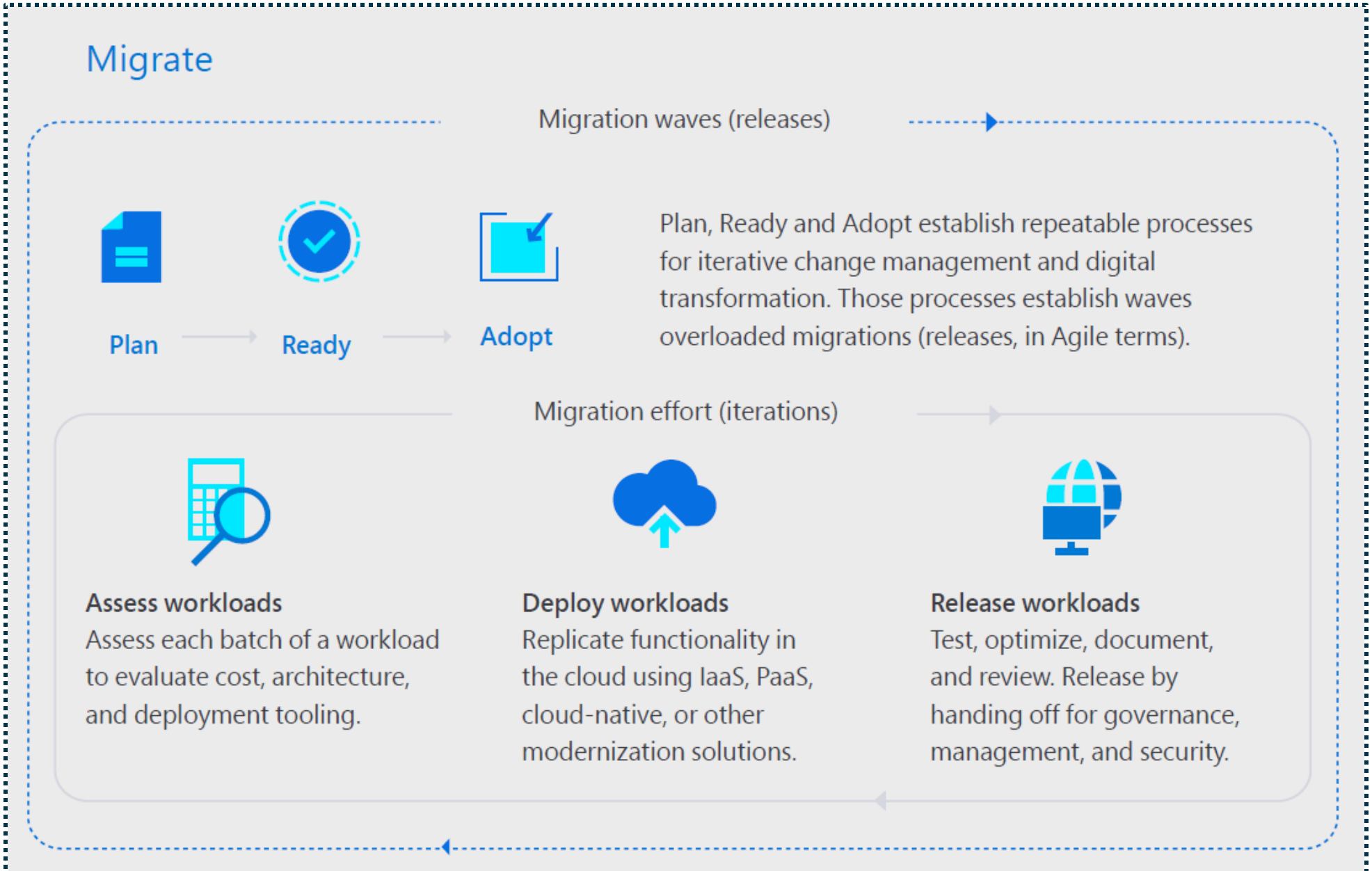
consolidates best practices from Microsoft and others, offering tools and guidance to shape technology and business strategies, driving desired outcomes in adoption efforts.

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
Define Strategy	Motivations	We will ensure a successful migration to Azure by identifying and documenting your business drivers, understanding strategic goals and expected outcomes, and defining specific business outcomes. We will align these with your overall business strategy, assess financial implications, and develop a cost-benefit analysis. We will evaluate your current AWS environment, identify and mitigate technical challenges, and assess your IT team's skills. We will create a training plan for Azure skills, align all stakeholders, establish clear roles and responsibilities, and define governance policies and compliance requirements. Finally, we will align these policies with your standards, identify potential risks, and develop a risk management plan.
	Business Outcomes	
	Financial Considerations	
	Technical Considerations	
	Skills Readiness Plan	
	Organizational Alignment	
	Governance and Compliance	
	Risk Management	
Migration Plan	Digital Estate Planning	We will inventory all digital assets and workloads, including applications, data, and infrastructure, to understand what needs to be migrated. We will ensure all stakeholders are aligned with the migration plan by defining roles, responsibilities, and establishing governance structures. A migration backlog will be created to prioritize workloads based on business impact and technical complexity, aiding in planning the migration sequence. We will choose the right tools, including assessment, migration, and monitoring tools. Finally, we will establish a detailed timeline with key milestones to track migration progress.
	Initial Organization Alignment	
	Migration Backlog	
	Tool Selection	
	Timeline and Milestones	
Getting Ready for Migration	Landing Zone Preparation	We will ensure your Azure landing zone is ready by setting up necessary infrastructure, networking, identity, and security configurations. We will prepare and configure assessment, migration, and monitoring tools. Appropriate Azure regions for workloads will be selected based on latency, compliance, and cost. Roles and responsibilities within your team will be aligned, and necessary skills ensured through training or certifications. Governance and compliance frameworks will be established, and a communication plan developed to keep all stakeholders informed about migration progress and issues.
	Tool Preparation	
	Azure Region Selection	
	Role Alignment	
	Skills Readiness	
	Governance and Compliance	
	Communication Plan	

Azure Migration (Cloud Adoption Journey – Phase wise approach)

Migration stages	Sub phases	Tasks Summary
Cloud Adoption phase/ Actual Migration	Classify workloads	To ensure an efficient Azure migration, we'll focus on classifying workloads and assessing their readiness. We'll design scalable and secure Azure architectures and deploy essential services. Our approach includes remediating and replicating databases with a commitment to data integrity. We'll perform comprehensive testing, communicate changes effectively, and finalize the migration. Post-migration, we'll focus on cost optimization and retrospectives to foster continuous enhancement.
	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	
Post Migration (Govern, Secure, Manage)	Assess workloads, Monitor & improve the performance, cost, operational efficiency, Security, Reliability (5 pillars of Well Architected Framework)	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.
	Release Workloads	

Azure Migration Saxon's Approach & Timelines

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2 to 4 days	1 to 2 weeks	1 to 2 weeks	2 to 4 weeks	1 to 2 weeks
Define Migration Strategy	**Migration Planning**	**Getting Ready for Migration / Pre-Migration**	**Cloud Adoption phase/ Actual Migration**	**Post Migration (Govern, Secure, Manage)**

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

Saxon's Deliverables of the Migration

Deliverables

- ✓ **Migration Strategy Document:** A comprehensive plan that outlines the migration process, including timelines, milestones, and risk management.
- ✓ **Detailed Assessment Report:** Documentation of the current on-premises environment, including inventory and dependencies.
- ✓ **Azure Architecture Design:** Detailed diagrams and documentation outlining the target Azure architecture and services.
- ✓ **Migration Execution Plan:** Step-by-step instructions for the migration, including any scripts or tools required.
- ✓ **Security and Compliance Plan:** A plan detailing how security and compliance will be maintained during and after the migration.
- ✓ **Testing and Validation Reports:** Results from pre-migration and post-migration testing, ensuring all systems operate as expected.
- ✓ **Cost Management Plan:** A forecast of costs associated with the migration and running the environment in Azure.
- ✓ **Cost Comparison summary :** We will provide a summary of cost comparisons before and after migrating to Azure, for the purpose of price comparison.
- ✓ **Training Materials:** Resources to train staff on new processes and technologies related to Azure.
- ✓ **Operational Runbooks:** Documentation for day-to-day operations of the Azure environment, including monitoring and maintenance procedures.
- ✓ **Post-Migration Review Document:** A review of the migration process, lessons learned, and recommendations for

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