

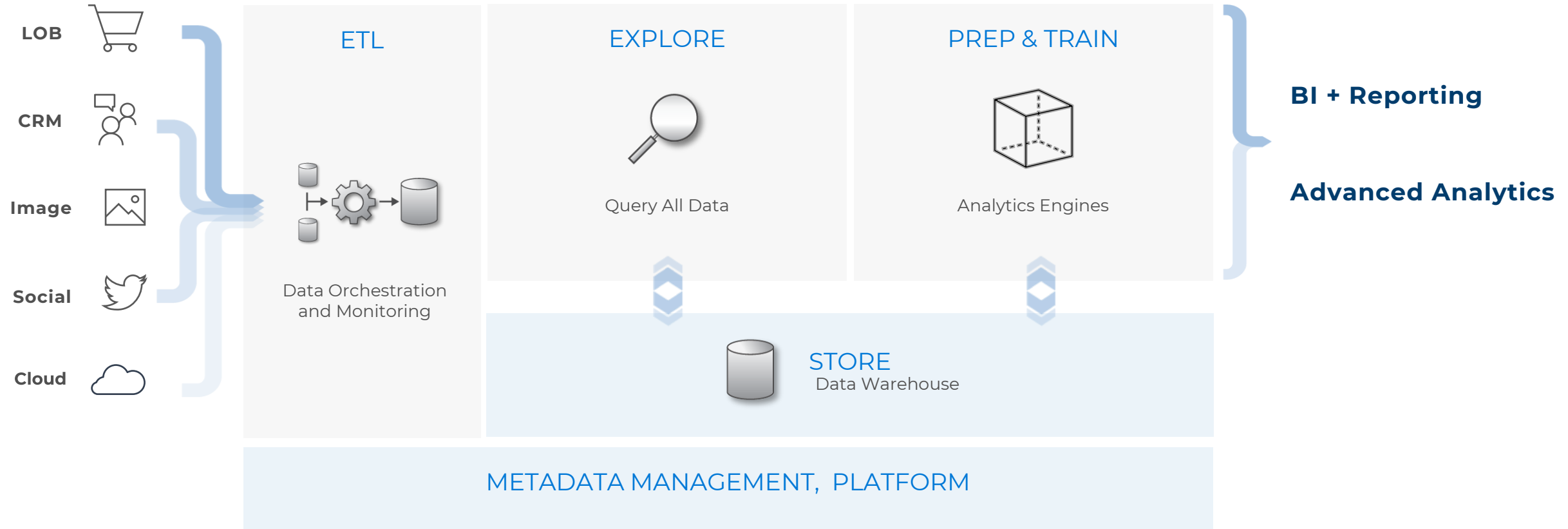
LUXEMBOURG

# From SQL On-Premises to the Cloud

Making the Move to Azure

## SQL on-premises Database Optimization for Azure

# Essential On-Premises Data Warehouse Architecture Basics



\*On-premises Data Warehouse – Logical Architecture

# Key Phases of a Data Migration Process



Assess

Migrate

Optimize

Secure and manage

Evaluate the needs

Create a migration plans

Evaluate the costs

Evaluate the resource needed  
(CPU, memory & storage)

Migration plan

Choose the type of migration

Configure cloud environment

Migration of the server

Migration of the data

Migration of the analytical tools

Optimize the costs

Review schedule process

Reinvest time and resources no  
longer used

Get to know the security in  
Azure : user management,  
access,...

Discover tools : Azure Key Vault,  
Azure Sentinel, Microsoft  
Security,...

Put measure in place :  
encryption, backups, disaster  
recovery

Monitor performance of traffic  
and compute

# Rehost / Lift and Shift

**Scenario:** Moving applications from the on-premise environment to the cloud with no changes to the underlying application.

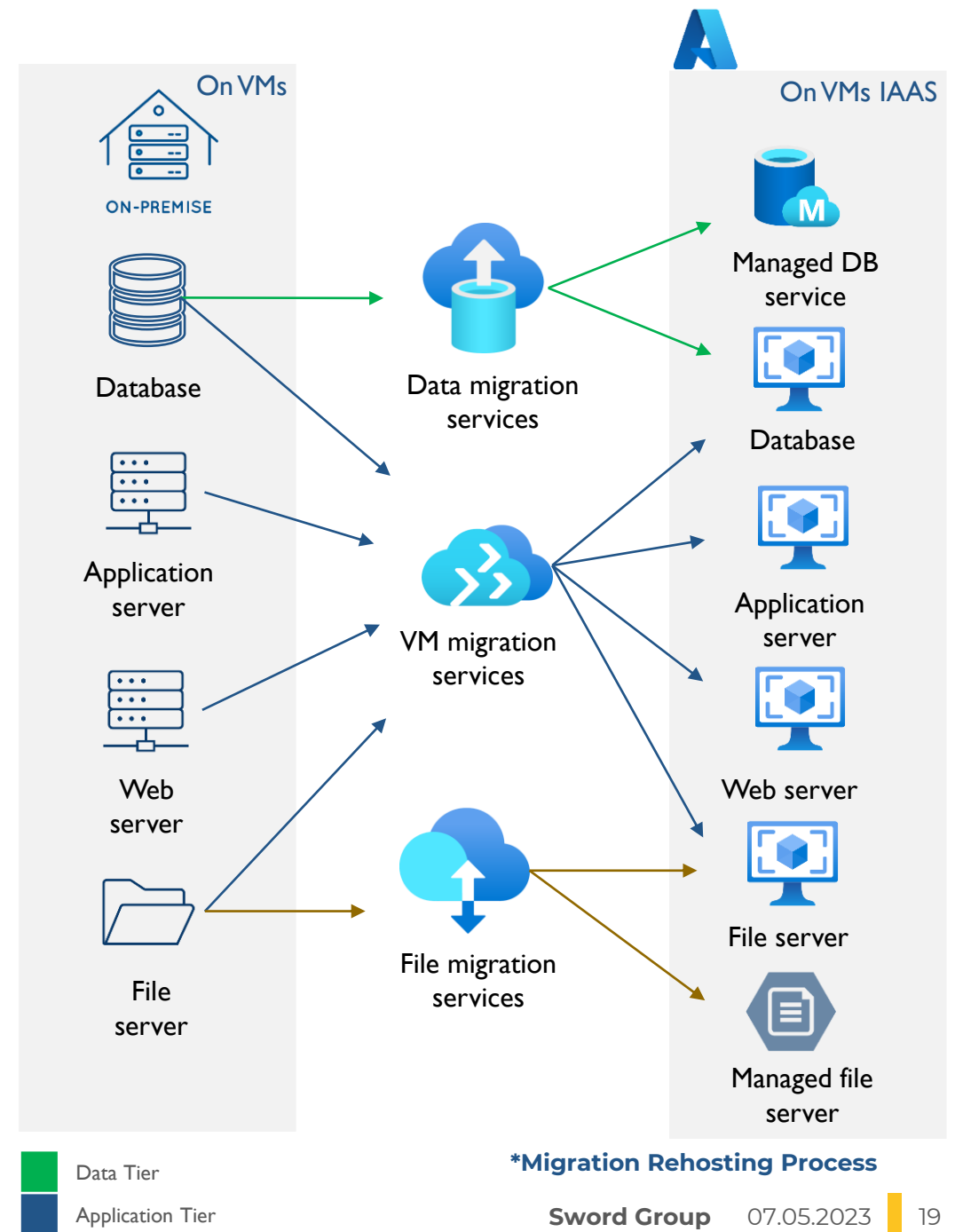
**Suitable for:** Legacy migrations, teams with limited cloud or Azure skills.

✓ Smaller risk of breaking the application, faster and easier migration.

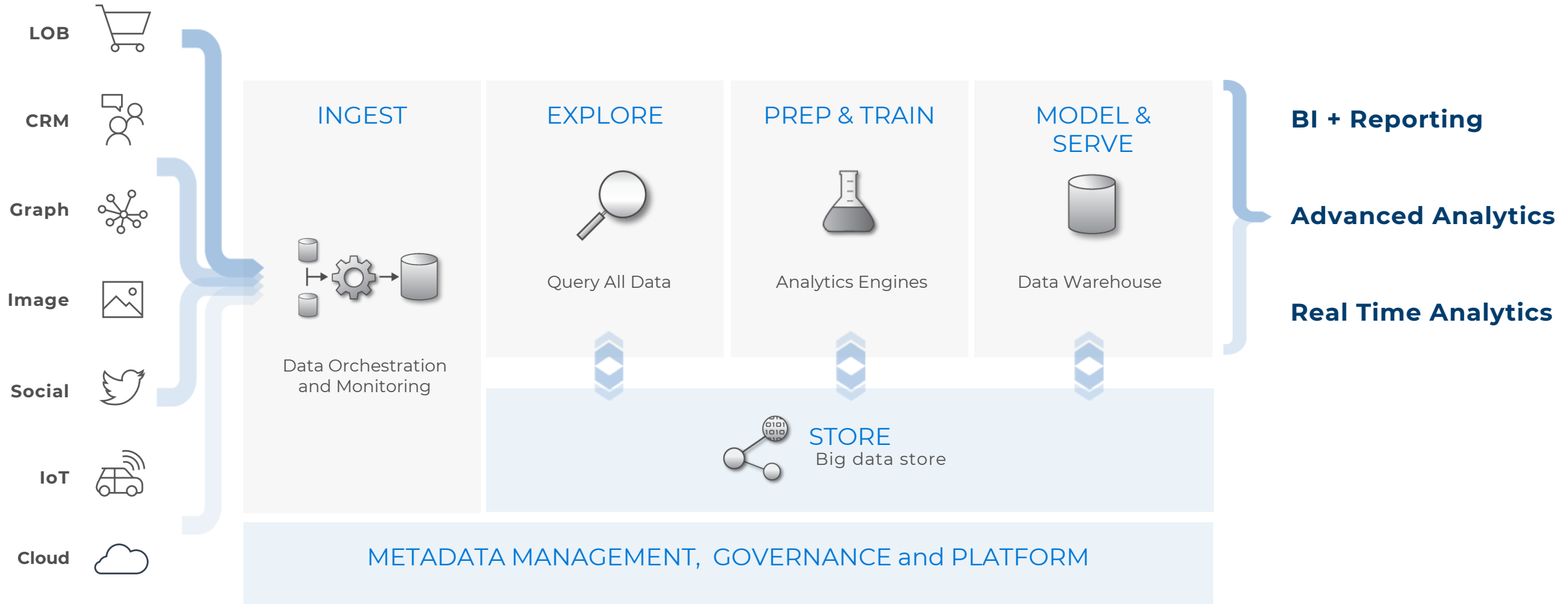
✗ Applications might use cloud resources less efficiently and be more difficult to scale and extend.

**Steps** to rehost SQL Server to Azure:

1. Assess the current SQL Server instance
2. Choose the Azure SQL deployment option
3. Prepare the Azure environment
4. Migrate / Optimize / Test the SQL Server instance for Azure



# Essential Modern Data Warehouse Architecture Basics



\*Modern Data Warehouse – Logical Architecture