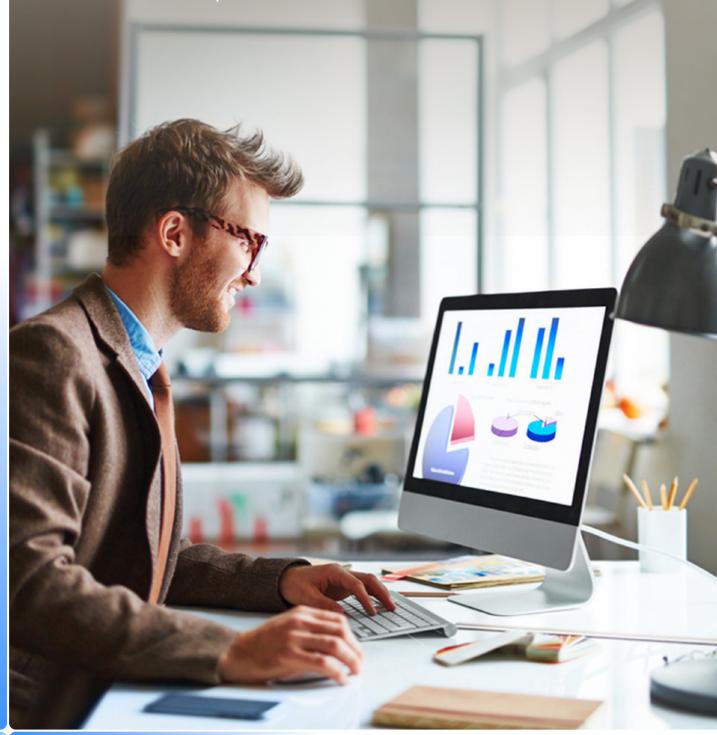


## **ADvantage Migrate**

Accelerating modernization of the data landscape



# The need for data migration and modernization

### Future-proofing the enterprise

Organizations must invest in appropriate initiatives to keep up with the rapid change of digital change and be ready for the future. These initiatives fall under two key domains:



#### **Business application domain:**

The use-cases under this domain include keeping the lights on (upgrading / changing the application database), application modernization and adoption of SaaS.



#### Data and analytics domain:

Over a period of time the data sources have become varied, and have increased multi-fold, requiring real-time data analysis. Thus, it necessitates migrating data from traditional and expensive data storage systems to modern cloud-based platforms that address these challenges.

### Simplifying the data and analytics architecture

As the data and analytics architecture complexity is moving towards the tipping point owing to increased enterprise-wide adoption of open-source and commercial products, organizations are scrambling for simplification. These initiatives can be grounded into two main categories:



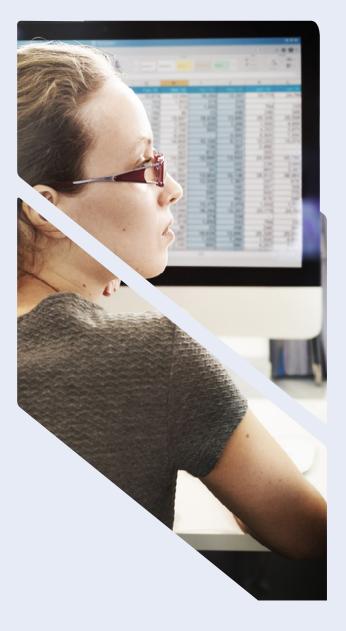
Data Engineering: Traditional ETL tools cannot cater to today's dynamic data landscape and its requirements. Hence, there's a need to migrate from traditional and expensive ETL tools to modern data processing solutions and consolidate the ETL landscape within an enterprise.



#### **BI Reporting and Dashboards:**

Organizations over the years have procured multiple BI tools resulting in scattered & non-contextual analytics. But today's enterprises need better visualization, story telling and self-service capabilities and wish to collaborate with the ecosystem by extending the data beyond the organization.

# The challenge of simplifying and modernizing the data landscape



Migrating application data from one database to another is not simple. Quite often, the underlying data model gets changed as part of the application modernization. It requires a smart analysis and decision framework to migrate data from the old model to the new one. Even if the data model remains the same, it does not make things easier. Generally, the impact is significant in re-engineering the functions that are developed by leveraging database-specific techniques. Other challenges include:



Existing Data Lakes and Data Warehouses have collected enormous amounts of data over time which is being used for critical enterprise reporting. Migrating this data as-is (lift and shift) will not utilize the capabilities of modern data models will have an impact on ETL jobs as well as reporting and analytics layer.



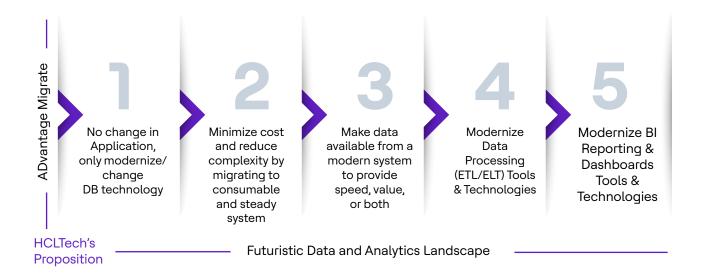
Traditional ETL tools have been used for many years and lot of business logic has gone into those black boxes. There is no clear and automated migration path for transitioning to modern data processing platforms.



Business teams have become used to existing reporting and analytics platforms and they need something more without disrupting what's already running for them.

### Introducing ADvantage Migrate

A one-stop solution to modernize the entire data landscape within an enterprise



# HCLTech's footprint in Snowflake migration patterns

### **Dimension 1:**

Migration of only the Data Storage layer keeping ETL/ELT layer intact | Use Snowflake only for the consumption layer | Include the modernization of Data platform, ETL/ELT and Marketplace & Analytics layer more holistically

### Modernize data platform to Snowflake

No change in Data processing and Reporting layers, only modernize Data platform to Snowflake

#### Modernize data platform as well as data processing layer

Modernize Data Platform as well as ETL/ELT Layer keeping the consumption data model and reporting/ dashboard layer same

### Consumption layer on Snowflake

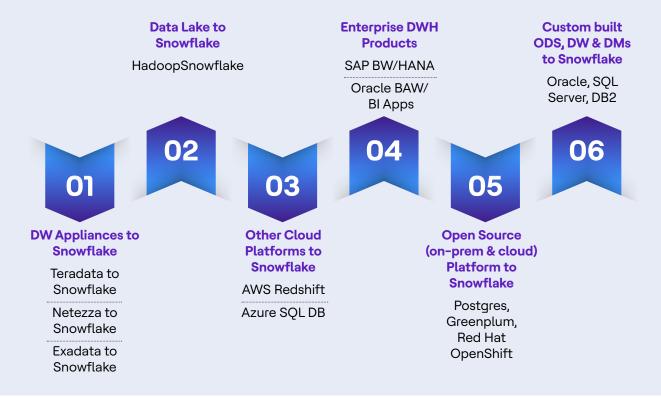
Design another consumption layer using Snowflake on top of existing Data Warehouse

#### Holistic approach to modernize entire data and analytics ecosystem

Modernize Data Platform, ETL/ELT Layer as well as Analytics processplatform to Snowflake

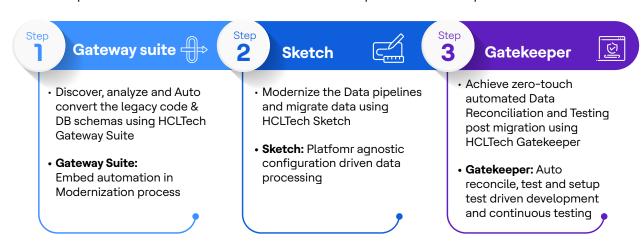
### **Dimension 2:**

Migration of DW Appliances | Migration Data Lake | Migration of Enterprise DWH | Custom built ODS, DW and DMs | Open Source | Other Cloud Platforms



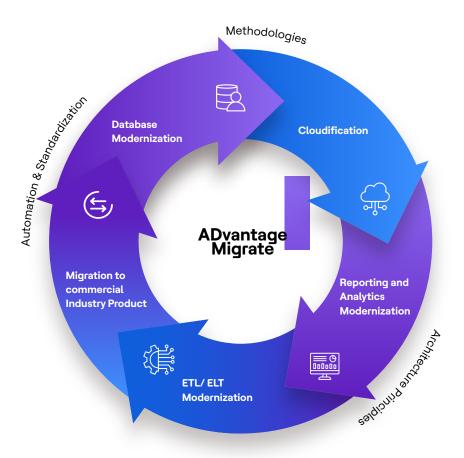
# Migrate to Snowflake leveraging HCLTech's ADvantage Migrate Suite

A one-stop solution to modernize the entire data landscape within an enterprise



A one-stop solution to modernize the enti Our experience and expertise in data engineering, cloud along with our proprietary methodologies, architecture principles to embed the standardization in the modernization process. re data landscape within an enterprise

### Services Spectrum



### HCLTech's accelerators















60% improvement in time-to-market



40% reduction in overall migration effort



Configurable and reusable components library



### Database Modernization – Services Catalogue



### Cloudification -Services Catalogue



#### **Hybrid Cloud Snowflake**

Assessment and Establishment of Migration Factory

Migrate Raw data to AWS S3, Azure Data Lake, GCS and build DW on Snowflake

Utilize Glue/ADF, Databricks, Spark for Data Processing

Implement DataOps

Provide end-to-end support



#### **AWS**

Assessment and Establishment of Migration Factory

Migrate Raw data to AWS S3 and build DW on Redshift

Utilize Glue, Databricks, Spark for Data Processing

Implement DataOps

Provide end-to-end support



#### **Microsoft** Azure

Assessment and Establishment of Migration Factory

Migrate Raw data to Azure Data Lake and build DW on Synapse

Utilize ADF, Databricks, Spark for Data Processing

Implement DataOps

Provide end-to-end support



### **Discovery to Strategy**

Current Data Landscape

Drivers for Cloudification

Strategy and Roadmap



#### **Evaluation to Plan**

Cloudification Plan



Cloud Technologies Evaluation

**Evaluation Framework** 

### **Execution to Target State**

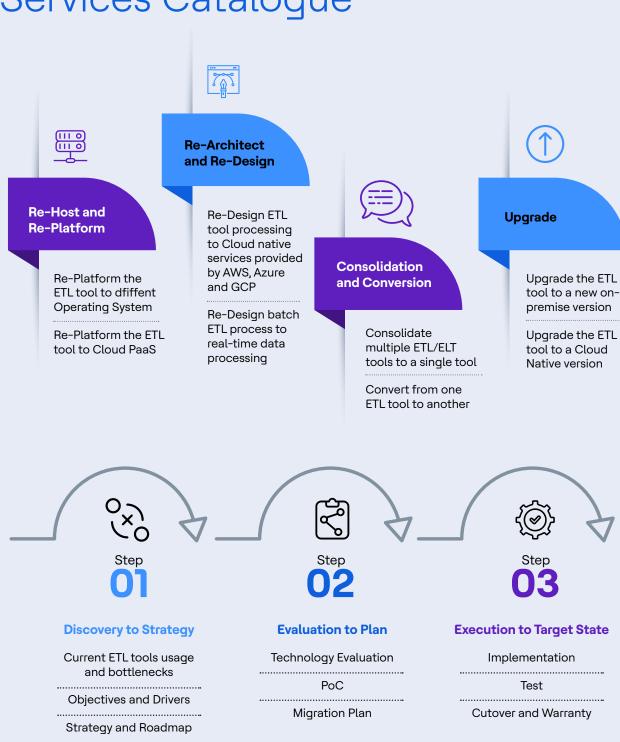
Implementation

Test

Cutover and Warranty



### ETL/ELT Modernization – Services Catalogue



**Evaluation Framework** 

### BI Modernization – Services Catalogue



# HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to 219,000+ people across 54 countries, delivering industry-leading capabilities centered around digital, engineering and cloud, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending September 2022 totaled \$12.1 billion. To learn how we can supercharge progress for you, visit heltech.com.

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