

DATA WAREHOUSE MODERNIZATION



Traditional Database Challenges



Expensive

Traditional databases cost more than **\$10K Per TB** in storage. HA/DR cost & IT management cost are also significant.



Inefficient

More than 50% of data in a database is **infrequently accessed**, while significant processing used for ETL.



Lack of New Data Support

Traditional relational Databases **cannot support** un-structured and new data formats.



Lack of New Use Case Support

Traditional databases are **challenged to support** new use cases for streaming data, global scalability & NoSQL access.



What makes a Modern Data Warehouse?

Assess 5 current categories:

Data Diversity - *How well does your warehouse support disparate data types ? How does it provide users with a current and holistic view of data from a variety of internal and external sources ?*

Infrastructure Agility - *How well does it support the various needs of your org by allowing access from anywhere ingesting data in real time, and separating storage from compute to enable independent scaling?*

Analytics Support - *How easy is it to adopt sophisticated analytical techniques at scale, such as ML, predictive analytics, deep learning, and IoT analytics?*

Collaboration and Sharing - *Can teams within your org and beyond share information and work together quickly and easily using data from your warehouse?*

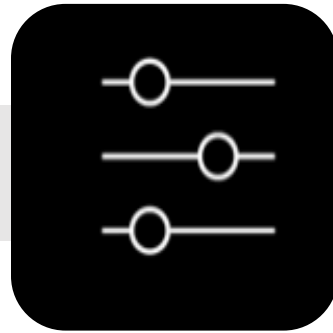
Security and Governance - *Are there tools and techniques in place to control data access, support data governance, and ensure compliance with data security standards?*

Data Warehouse Modernisation in an Enterprise



Consolidate Data Marts

Take advantage of a modern architecture that brings together all your data in one place and makes it available to all your users and applications.



Handle any Scale

Deliver rapid insights at any scale without the complexity and headaches of traditional data warehouse or noSQL solutions.



Support Modern Analytics

Build and deploy innovative analytics applications delivered by a data warehouse that can seamlessly adapt to rapidly growing and changing demands.

OUR DATA & ANALYTICS SOLUTIONS

DESCRIBE, PREDICT, PRESCRIBE AND DECIDE

Product Type

CLOUD ENABLEMENT CLOUD OPERATIONS

FP - Fixed Price Product | T&M - Time and Materials (Offering)



Data & Analytics Strategy

Analytics Maturity focused Cloud Adoption Strategy engagement.

- Data Strategy (FP)**
Develop a strategy to unlock data insights.
- Data Migration Assessment & Planning (FP)**
Define Modernization plan and effort.
For complex customer engagements

Data Warehouse Modernization

Consolidate Data Warehouses & Data Marts to handle any scale of data and modern analytics workloads.

- Data Warehouse Replatform (T&M)**
Modernize Data Warehouse on Cloud.
- Analytics Workload Refactor (T&M)**
Refactor & Retire existing analytics workloads

Data & Analytics Platform

Cloud Native platform, with flexible deployment options, Enterprise Security & Data Management, and Managed Services.

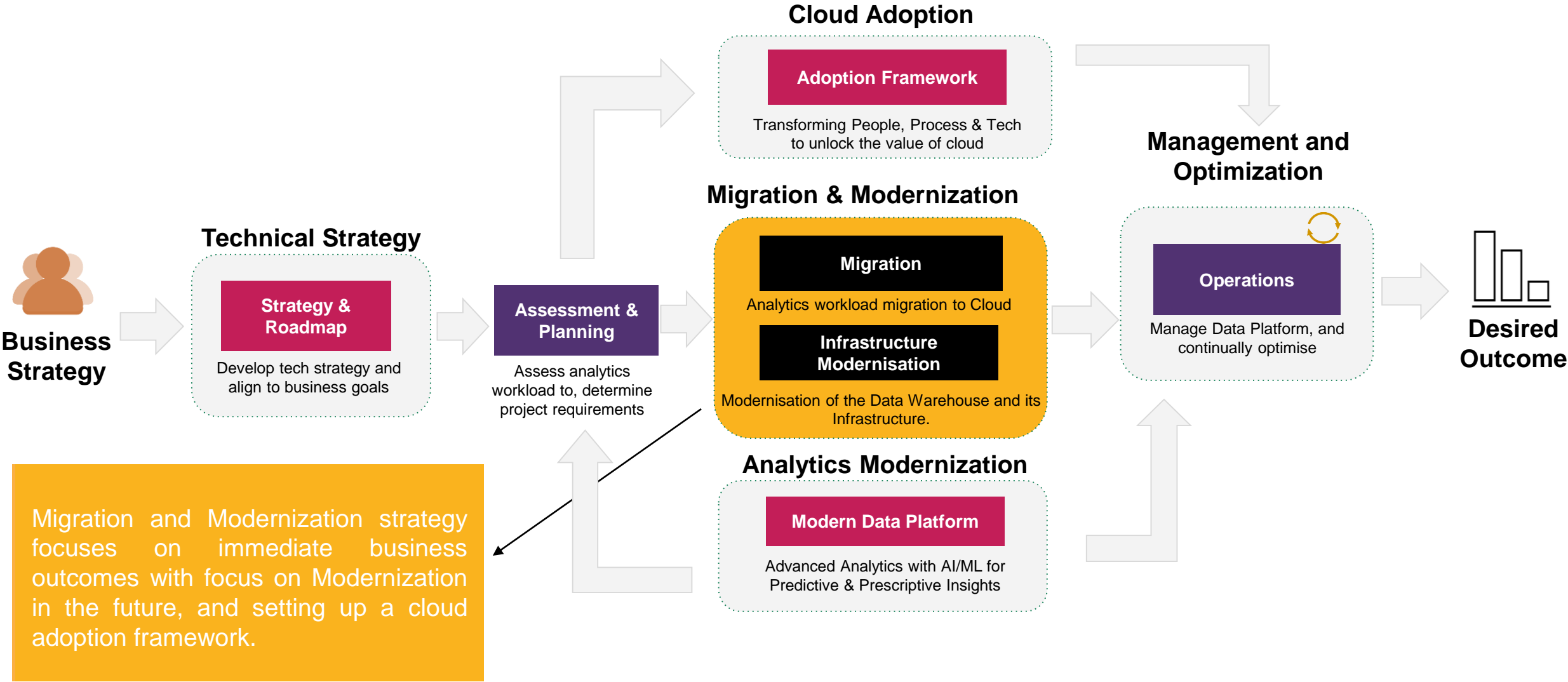
- Data Landing Zone (FP)**
Collect & Govern
- Data Science (T&M)**
Process & Analyze
- Machine Learning (T&M)**
Model Development

Optimization Services

Efficiently maintain, secure, and improve.

- Data Reliability (New Release Dec 2019)**
- Infrastructure Reliability**
- Cost Reliability**

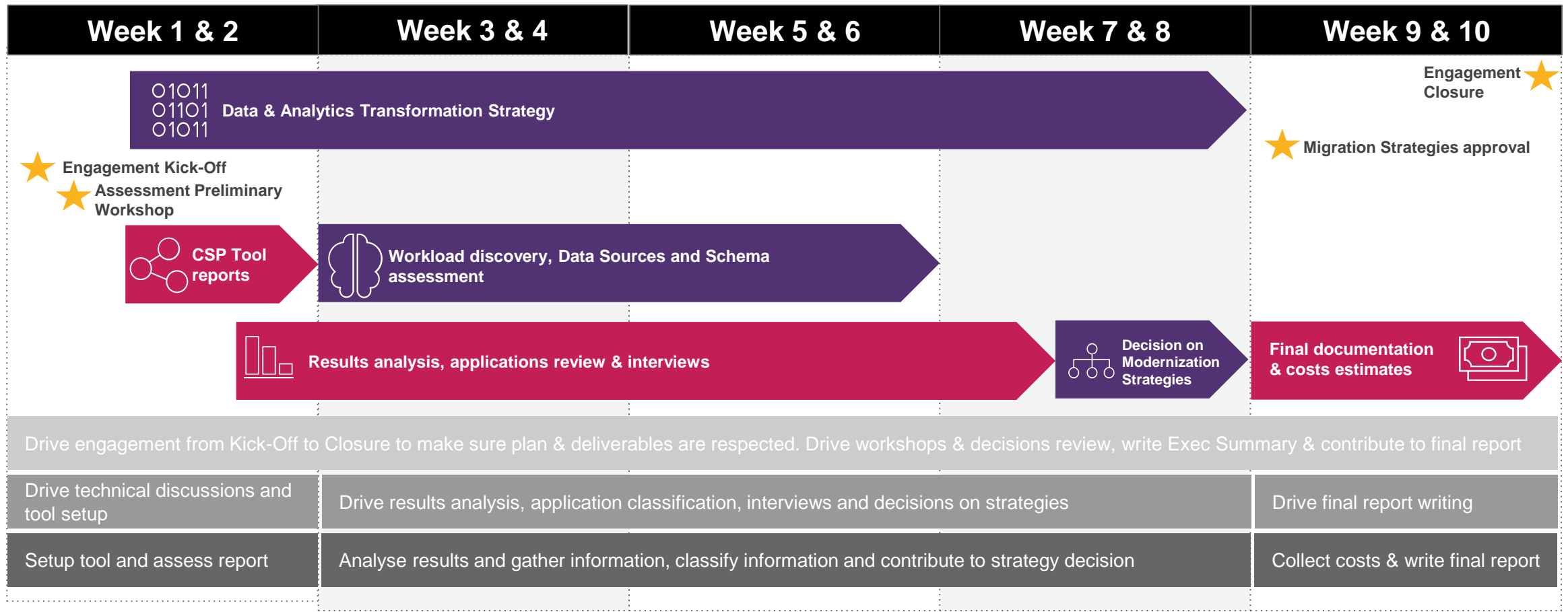
Migration is part of a bigger Cloud Journey



Data Warehouse Migration timelines

Example for a standard scope of an Enterprise Data Warehouse and BI workloads

Scope of POC for functional & stress testing can change high level estimates.

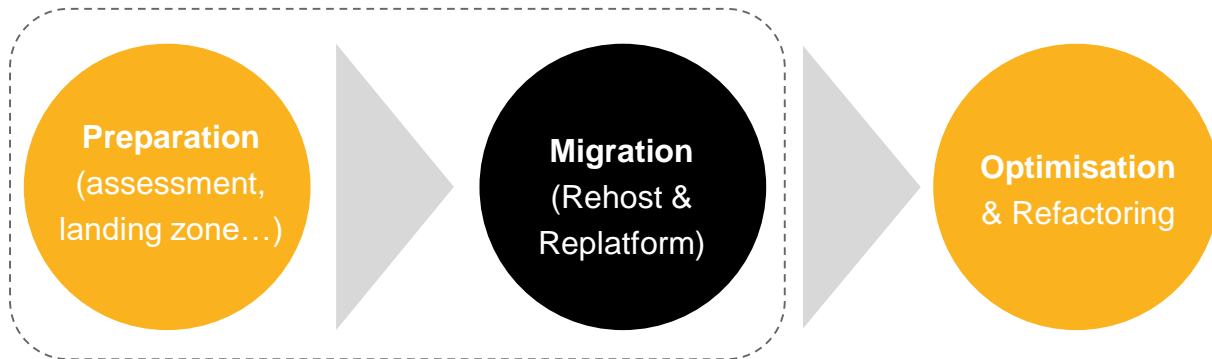


Migration Strategy Options

Two main customisable strategies

Migrate First, Modernize Later

Recommended for an accelerated move to the Cloud



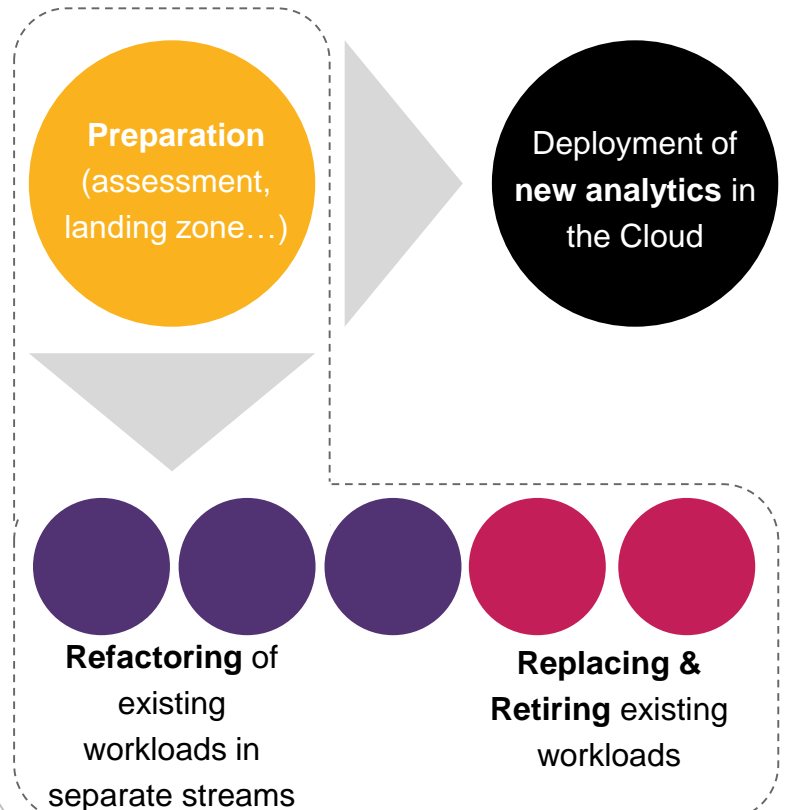
Key Message: Migrate First but do not forget to optimise later to fully benefit from Cloud capabilities

Client's own Strategy

Recommended for very specific business requirements

Refactor & Modernize

Recommended for a long-term innovation strategy



Step-by-Step DW Migration Process

Cloud Landing Zone

- Deploy or Enhance existing Cloud Landing Zone
- Integrate security, network and access requirements

Deploy CSP Services

- Setup instances for Rehosting services
- Setup Redshift and other services for Replatform

Data Warehouse Migration

Schema

Data

ETL & Pipelines

Metadata

Tooling

Users & Apps

Agile Sprints

Testing & Acceptance

- Functional testing by Tools, domain and end to end
- Performance, scalability and cut-over testing
- HA/DR cutover testing

Cutover & Go-Live

- Offline or online cut-over (How much downtime?)
- Data Refresh, Pipeline & User cutover

Thank you