

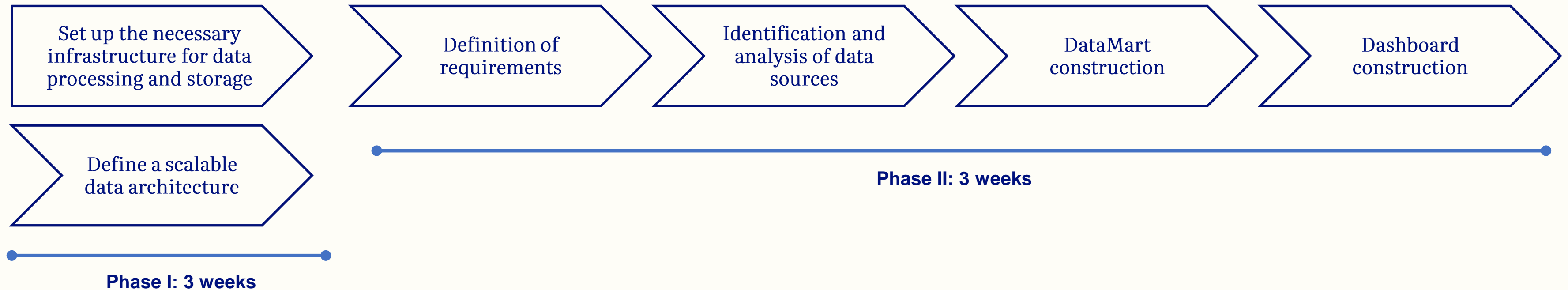
DataMart on Azure and PowerBI

Implementation of a Data Warehouse with consumption in PowerBI

Objectives

- Analyze current data sources.
- Define a scalable data architecture.
- Set up the necessary infrastructure for data processing and storage.
- Define and implement DataMarts to cover analytical needs.
- Build a dashboard for a department within the company.

Phases



Phases

DATAMART ON AZURE AND POWER BI

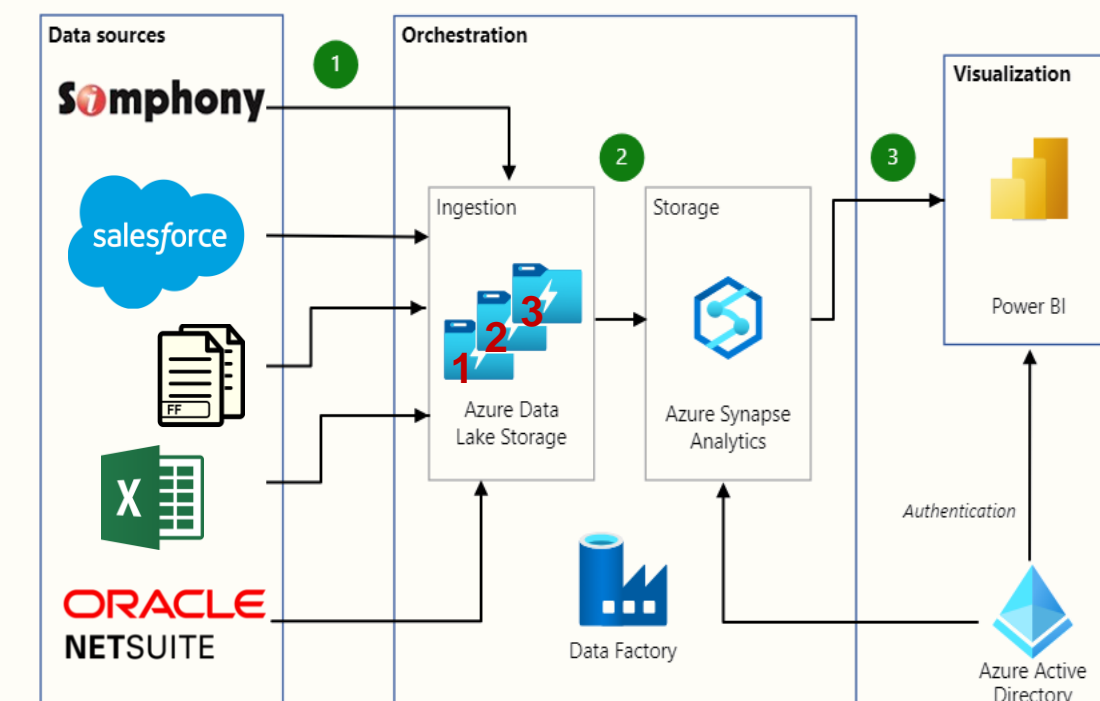
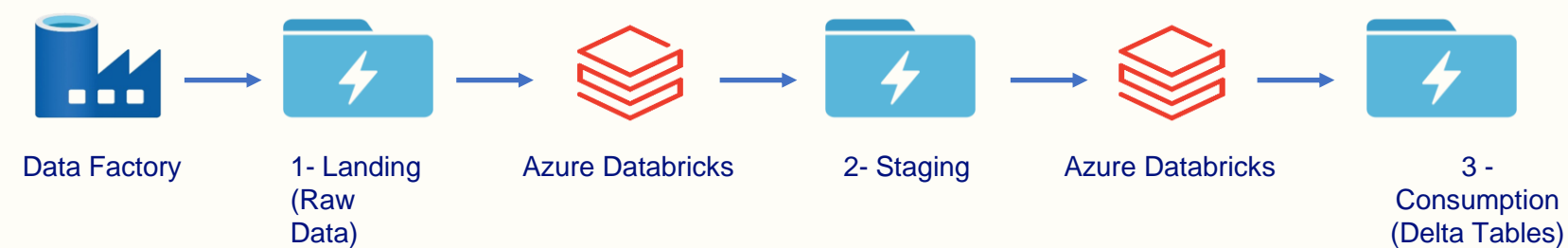


Deploy a customized Data Lake with ADF, Storage, Databricks, 2 environments (see diagram).

- Architectural setup.
- A knowledge transfer session at the end of the Project (1.5h).
- IaC (Infrastructure as Code) templates are not included.

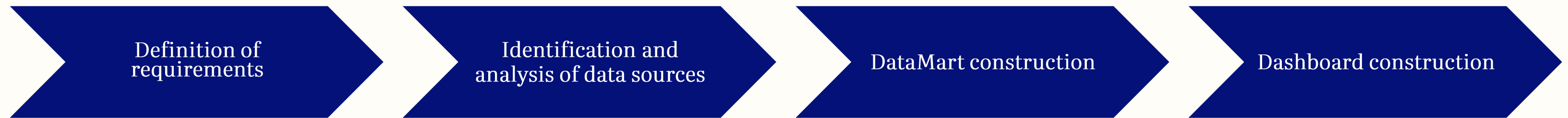
We propose creating 3 layers for data processing:

1. **Landing:** This is an initial layer where direct data extraction from the source occurs.
2. **Staging:** An intermediate layer where data preparation, transformation, and overall model construction take place.
3. **Consumption:** A layer for information consumption, where analytical tools like Power BI connect; this is the proposed tool for visualization in this case.



Phases

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Tasks

Assessment in defining requirements based on the department's needs.

Analyze current reporting, manual transformations.
Establish connections with sources and analyze extractions.

Extract the defined data.
Design and implement the DataMart with necessary transformations.

Prepare a dashboard with the necessary adapted charts and visualizations that address the actual needs identified by business users.

Deliverables

Detailed requirements document

Technical document
Definition of KPIs and metrics
Mock-up of the dashboard

Updated technical document
Calculation of KPIs and metrics
Updated dashboard mock-up
Area's data model

Final technical document
Definitions and calculations of published KPIs
Dashboard



Data Manager

- ✔ Problem and obstacle detection.
- ✔ **Ensure quality:** testing validation and review of acceptance criteria with data specialists.
- ✔ **Task review and workload estimation.**
- ✔ Suggestion of improvements and **business expertise.**



Data Engineer

- ✔ **Efficient execution.**
- ✔ **Process optimization, data refinement,** and identification of data quality issues.
- ✔ **Development, testing,** and implementation of models.



Data Architect



- ✔ Support and guidance in data model design.
- ✔ Application of best practices and technical guidelines.
- ✔ Cross-sector perspective and value proposition.





Thank you



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