# **Data Platform Modernization**

Data Platform Modernization is used to identify an **end-to-end Business Intelligence and Analytics solution** built leveraging the cuttingedge cloud-native services offered by the **Azure Public Cloud Services**.

BIP guides his customers in migrating and modernizing legacy data warehouses to Public Cloud by enabling new paradigms for data-driven organizations.



## **Business Benefits**

### **Cost Benefits**

- Elimination of up-front investment
- Elimination of on-prem related OpEx
- Reduction of EDW daily administration costs
- Consumption based pricing

### Reduce time to market

Deliver customer apps quickly

## **New Al use-cases**

Off-the-shelf AI capabilities

## **Unlock real-time insights**

Re-act quickly to changes

## **Security**

 Build with the Highest Standards for Privacy and Data Security

## **Business Continuity**

Reduce business disruption

### Service Model

Restructuring IT costs

## Flexible work

Greater flexibility in how employees work



## **Data Platform Modernization on Microsoft Azure**

Microsoft Azure provides a suite of cloud-native services to define an end-to-end Data Analytics solution.

### **RAW Data Layer**



Storage

Blob storage is used as a staging area for the source data before loading it into Azure Synapse.



Data Lake Storage

Data Lake Storage extends Azure Blob Storage capabilities in order to provide a data lake solution for big data.

### **Data Integration**



#### **Data Factory**

Data Factory is a managed service that orchestrates and automates data movement and data transformation. It is usually used to coordinate the various stages of the ETL/ELT processes.



#### **Databricks**

Databricks is an Apache Sparkbased analytics platform. In is usually used to develop ETL pipelines.

### **Data Warehousing**

Synapse Analytics

Azure Synapse is a distributed

MPP system designed to perform

analytics on large data. It is the

service used as a Cloud Data

Warehouse



#### Microsoft PowerBI

Visualization

Power BI is a suite of business analytics tools to analyze data for business insights.



#### **Analysis Services**

Analysis Services is a fully managed service that provides data modeling capabilities. The semantic model is usually loaded into Analysis Services.

#### Al and ML



#### Machine Learning

A fully managed cloud service to build and operationalize Machine Learning models.



#### **Databricks**

Apache Spark-based service to write Al solutions using Python, Scala, R, Java, and SQL, as well as using data science frameworks and libraries.



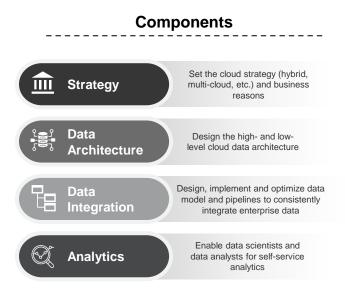
#### **Cognitive Services**

A comprehensive family of AI services and cognitive APIs to help you build intelligent apps



# **Approach to Data Platform Modernization for Analytics**

Keeping in mind four areas of intervention, the approach is to set up a three-step approach to sustain the evolution of the key fundamentals towards the Data Platform Modernization for Analytics





Definition of the strategic direction and understanding of the as-is to assess the technical and economic feasibility, evaluate the architecture, organizational maturity and availability of the data.

Identification and prioritization of initiatives with a clear roadmap for execution to be targeted and co-creation of the main Data Architecture pillars to build a solid foundation

THE FOUNDATION

Activation and configuration of cloud architectural components, development of the integrated enterprise data model,

& IMPROVE

ingestion/transformation pipelines and implementation of analytical and BI use cases



