Agenda
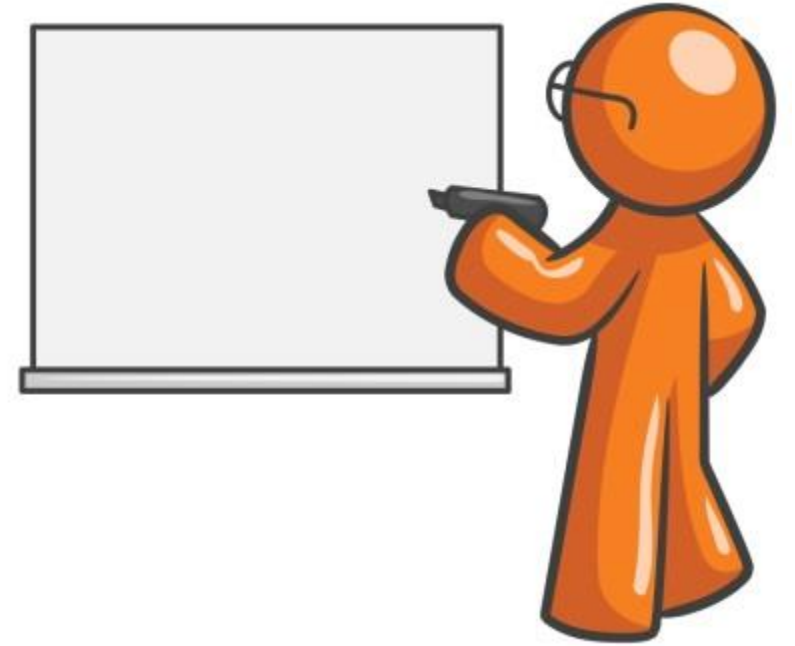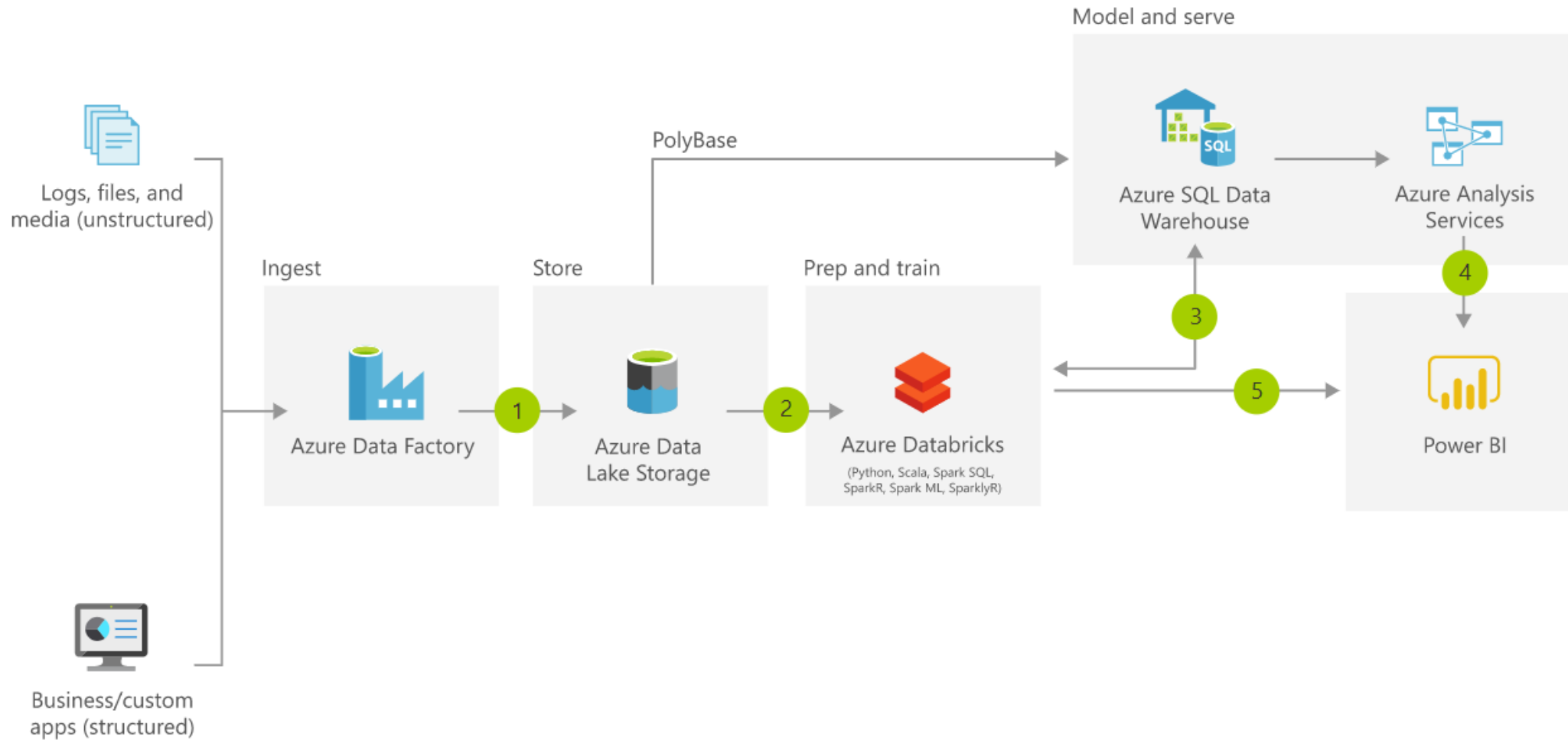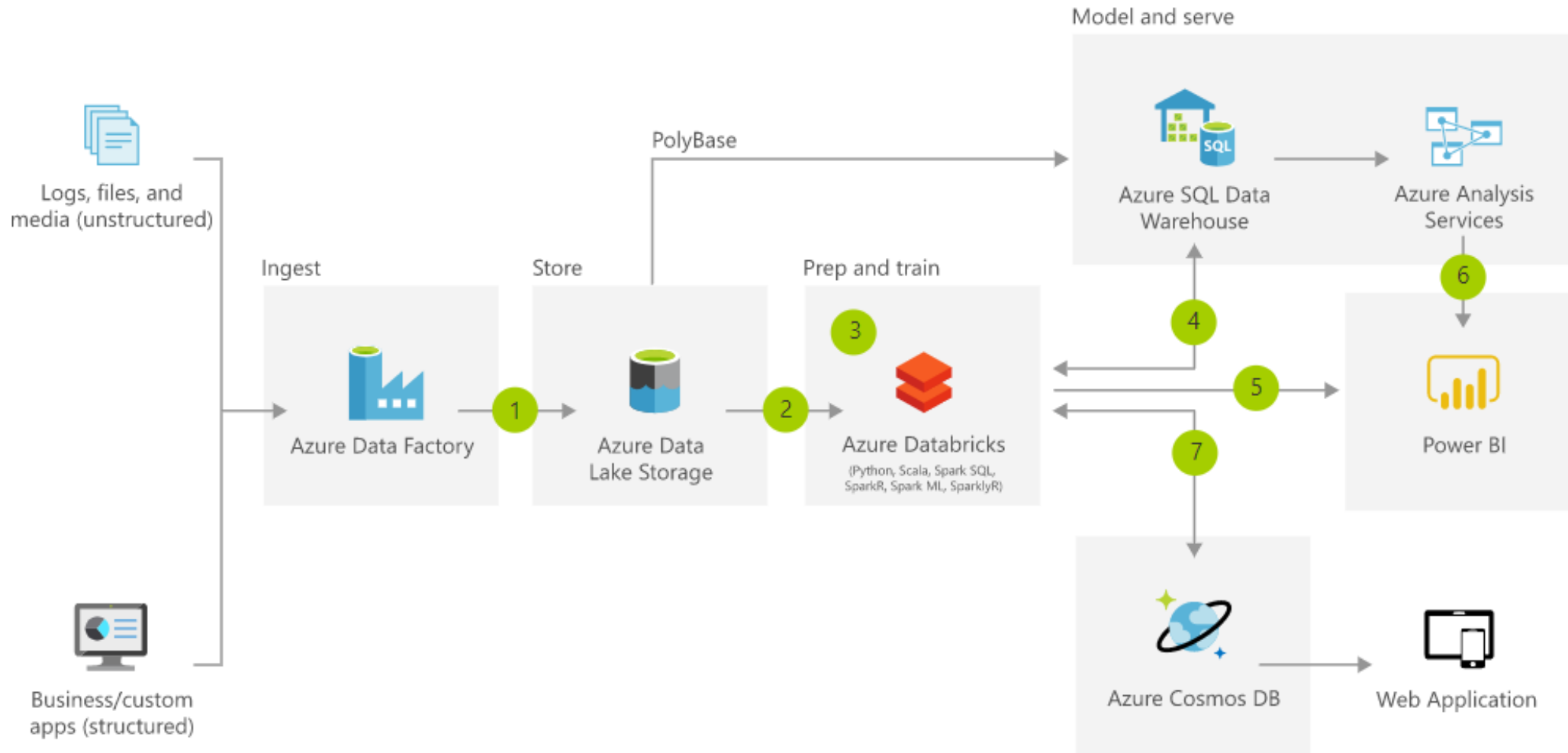
▸ Azure solution architectures
  ◦ Modern Data Warehouse
  ◦ Advanced analytics on big data
  ◦ Real-time analytics
▸ ETL, ELT or ?
▸ What about the Traditional DW?
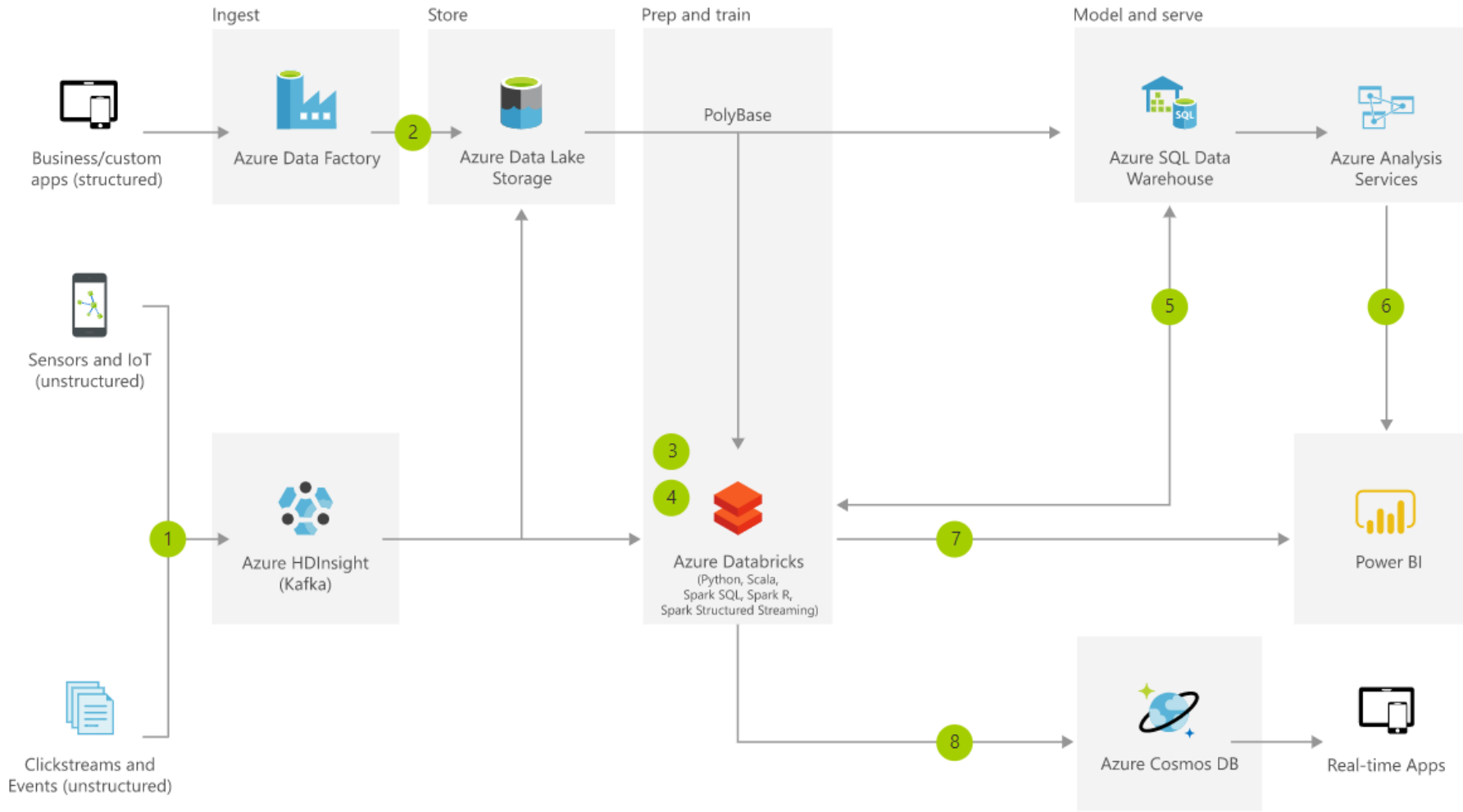
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Modern Data Warehouse

Advanced analytics on big data

Real-time analytics

Business/custom apps (structured) → Ingest: **Azure Data Factory** → ② → Store: **Azure Data Lake Storage** → PolyBase → Model and serve: **Azure SQL Data Warehouse** → **Azure Analysis Services**

Sensors and IoT (unstructured)

Clickstreams and Events (unstructured)

① → **Azure HDInsight (Kafka)** → Prep and train: ③ ④ **Azure Databricks** (Python, Scala, Spark SQL, Spark R, Spark Structured Streaming)

⑤ ⑥ ⑦ ⑧

Power BI

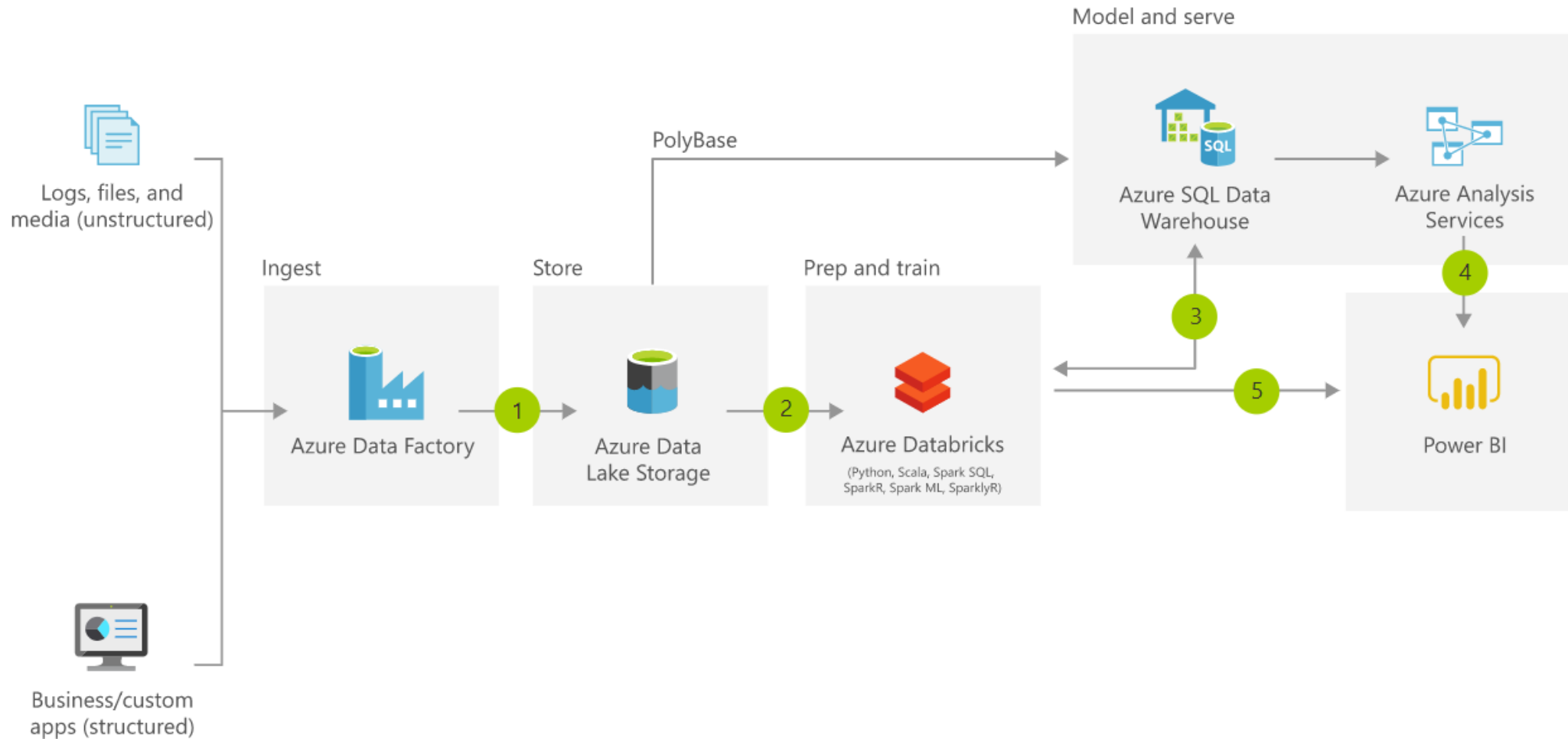**Azure Cosmos DB** → Real-time Apps

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ETL, ELT or ISPTMS ?

▸ Extract

▸ Load

▸ Transform

▸ Load

▸ Ingest

▸ Store

▸ Prep and train

▸ Model and serve

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Traditional Data Warehouse in Azure

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Traditional Data Warehouse in Azure

Transform

SQL

Azure SQL DB

Load

Logs, files, and
media (unstructured)

Extract

Azure Data Factory

Serve

Azure Analysis
Services

Power BI

Archive

Azure Data
Lake Storage

Business/custom
apps (structured)

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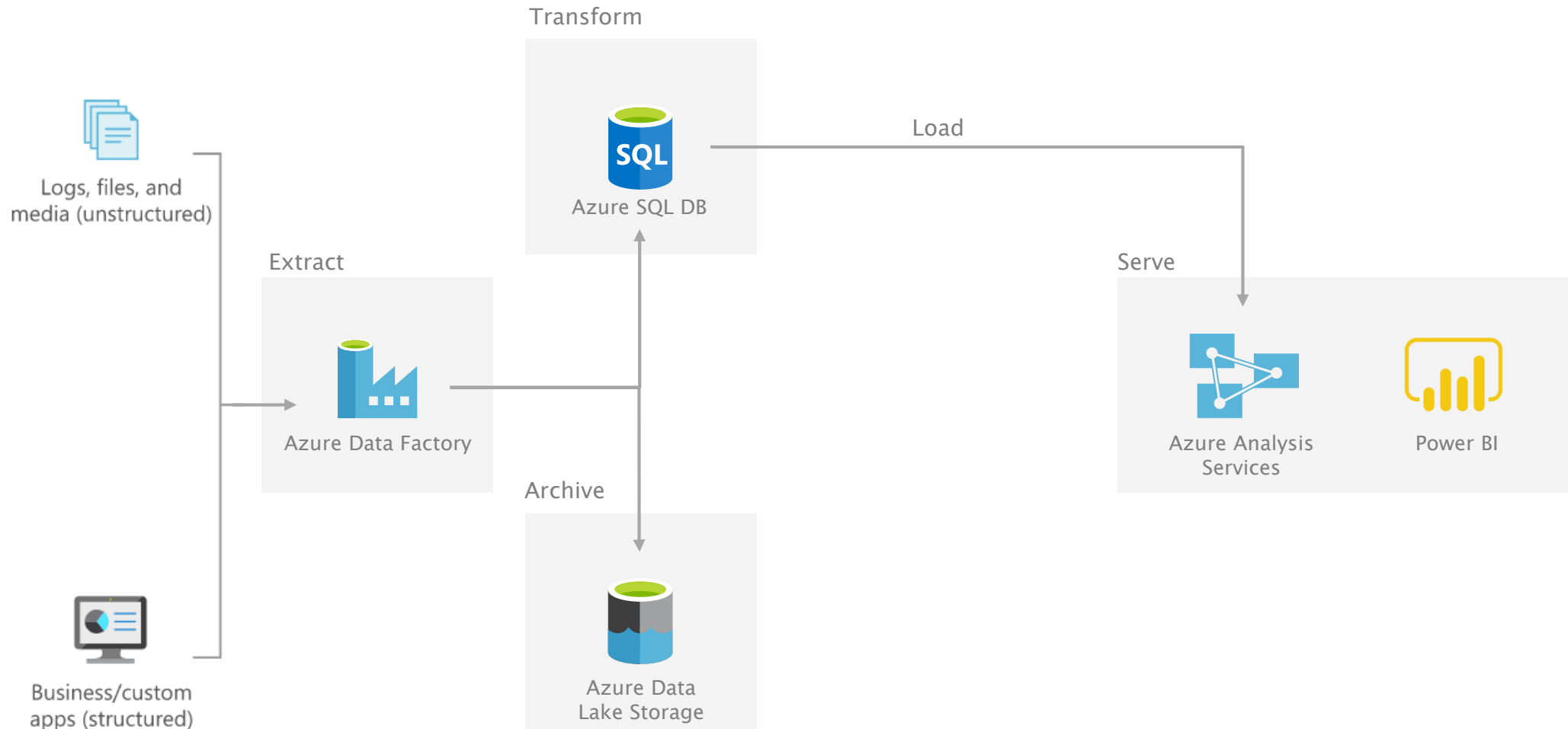
Ressources

▸ Modern Data Warehouse: https://azure.microsoft.com/en-us/solutions/architecture/modern-data-warehouse/

▸ Advanced analytics on big data: https://azure.microsoft.com/en-us/solutions/architecture/advanced-analytics-on-big-data/

▸ Real-time analytics: https://azure.microsoft.com/en-us/solutions/architecture/real-time-analytics/

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