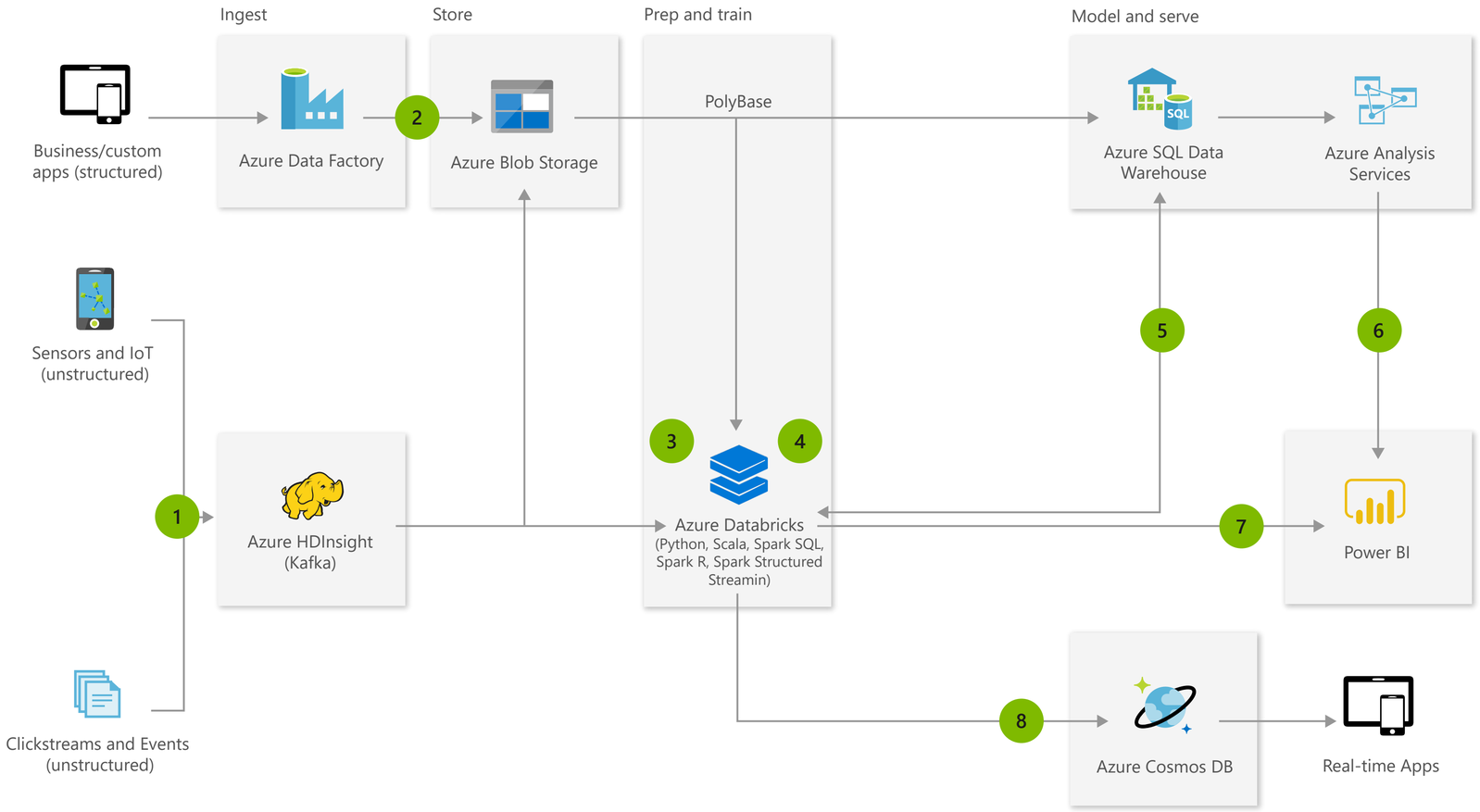
Real-time analytics



Microsoft Azure also supports other Big Data services like Azure IoT Hub, Azure Event Hubs, Azure Machine Learning and Azure Data Lake to allow customers to tailor the above architecture to meet their unique needs.

Architecture overview

Get insights from live, streaming data with ease. Capture data continuously from any IoT device or logs from website clickstreams and process it in near-real time.

1. Easily ingest live streaming data for an application using Apache Kafka cluster in Azure HDInsight.
2. Bring together all your structured data using Azure Data Factory to Azure Blob Storage.
3. Take advantage of Azure Databricks to clean, transform, and analyze the streaming data, and combine it with structured data from operational databases or data warehouses.
4. Use scalable machine learning/deep learning techniques, to derive deeper insights from this data using Python, R or Scala, with inbuilt notebook experiences in Azure Databricks.
5. Leverage native connectors between Azure Databricks and Azure SQL Data Warehouse to access and move data at scale
6. Build analytical dashboards and embedded reports on top of Azure Data Warehouse to share insights within your organization and use Azure Analysis Services to serve this data to thousands of users.
7. Power users take advantage of the inbuilt capabilities of Azure Databricks and Azure HDInsight to perform root cause determination and raw data analysis.
8. Take the insights from Azure Databricks to Cosmos DB to make them accessible through real time apps.

Products

- SQL Data Warehouse
- Data Factory
- Databricks
- Blob Storage
- HDInsight
- Analysis Services
- Cosmos DB
- Power BI