#GlobalAzure

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Big Data con Azure Data Explorer

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Agenda

Arquitectura Azure Big Data
Data Streaming
Azure Data Explorer
Kusto Query Language (KQL)

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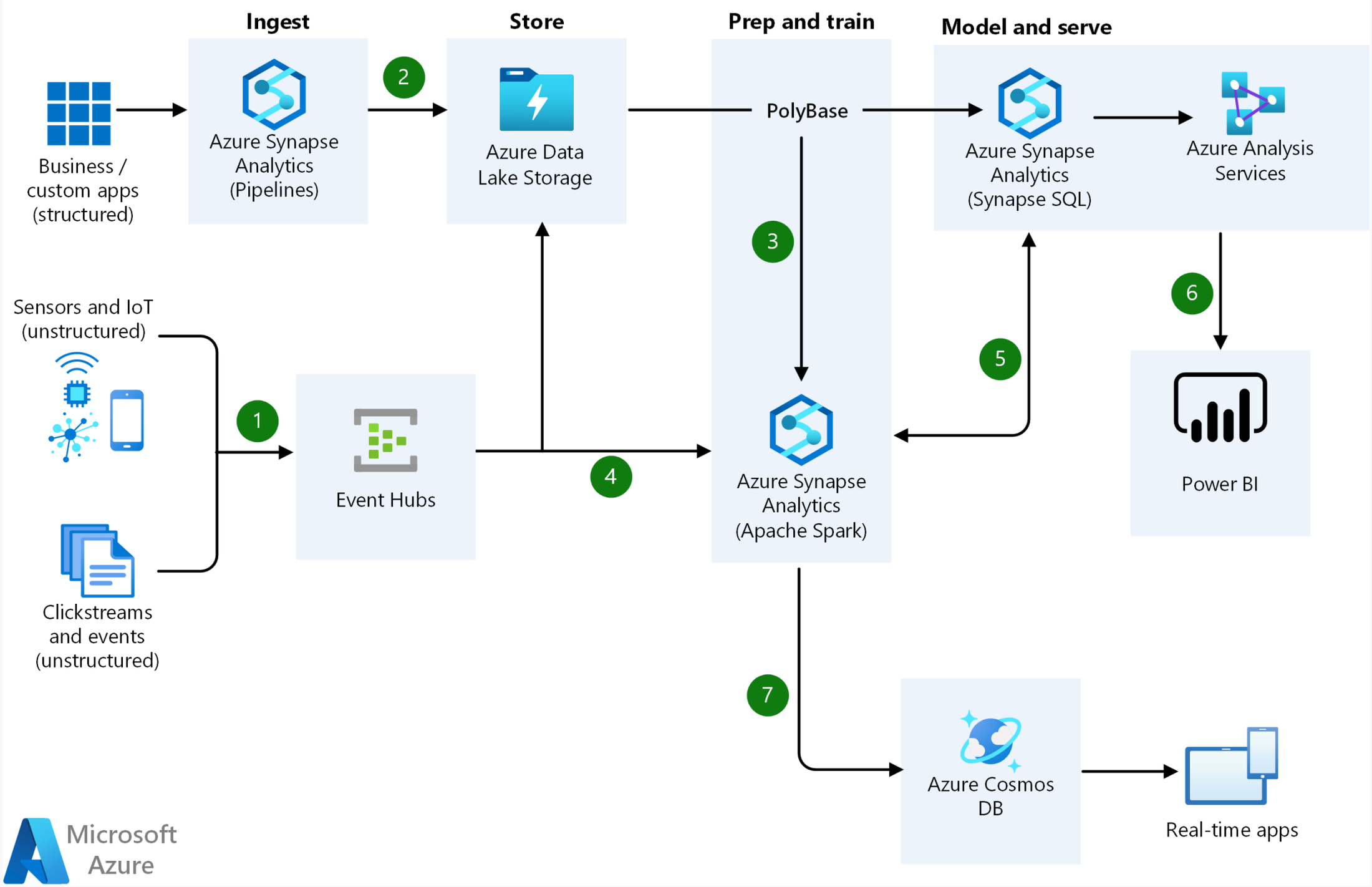
Arquitectura Azure Big Data


Ingest
Store
Prep and train
Model and serve
Business / custom apps (structured)
Azure Synapse Analytics (Pipelines)
2
Azure Data Lake Storage
PolyBase
Azure Synapse Analytics (Synapse SQL)
Azure Analysis Services
3
6
Sensors and IoT (unstructured)
1
Event Hubs
4
Azure Synapse Analytics (Apache Spark)
5
Power BI
Clickstreams and events (unstructured)
7
Azure Cosmos DB
Real-time apps
Microsoft Azure

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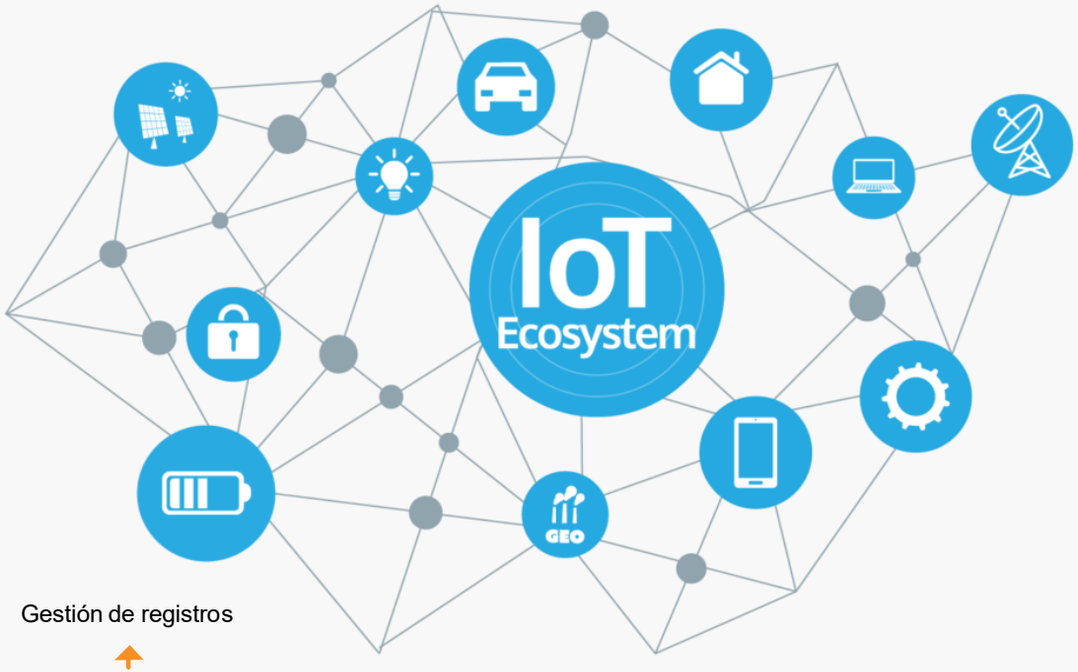
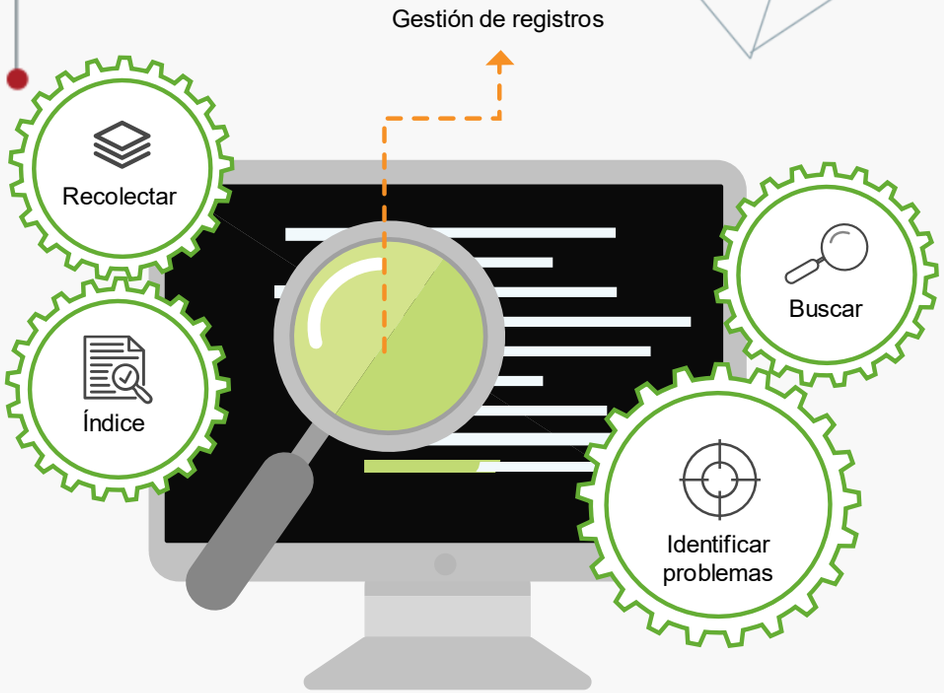
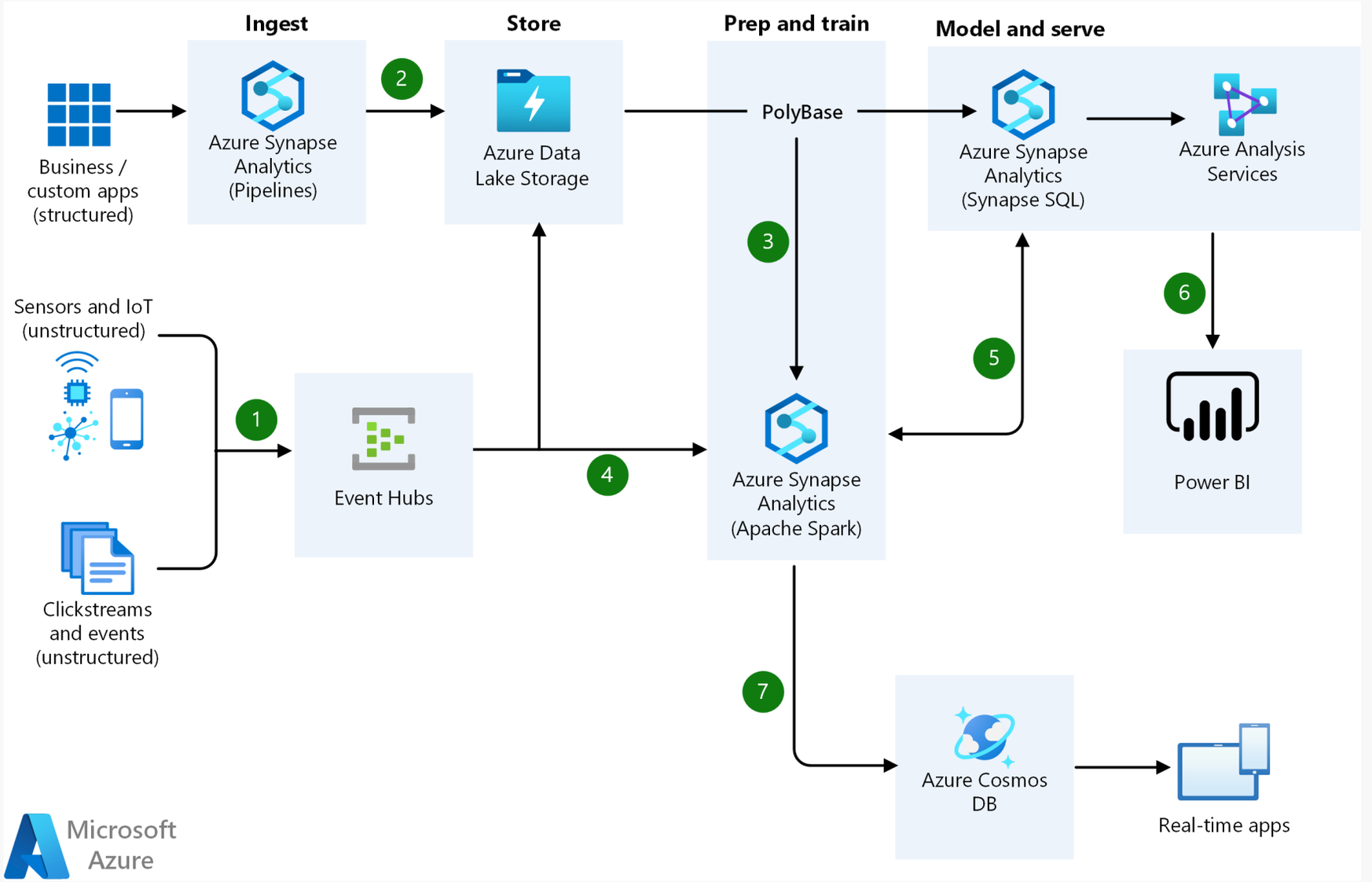
Data Streaming


IoT
Ecosystem
GEO


Gestión de registros
Recolectar
Índice
Buscar
Identificar
problemas


IoT
Ecosystem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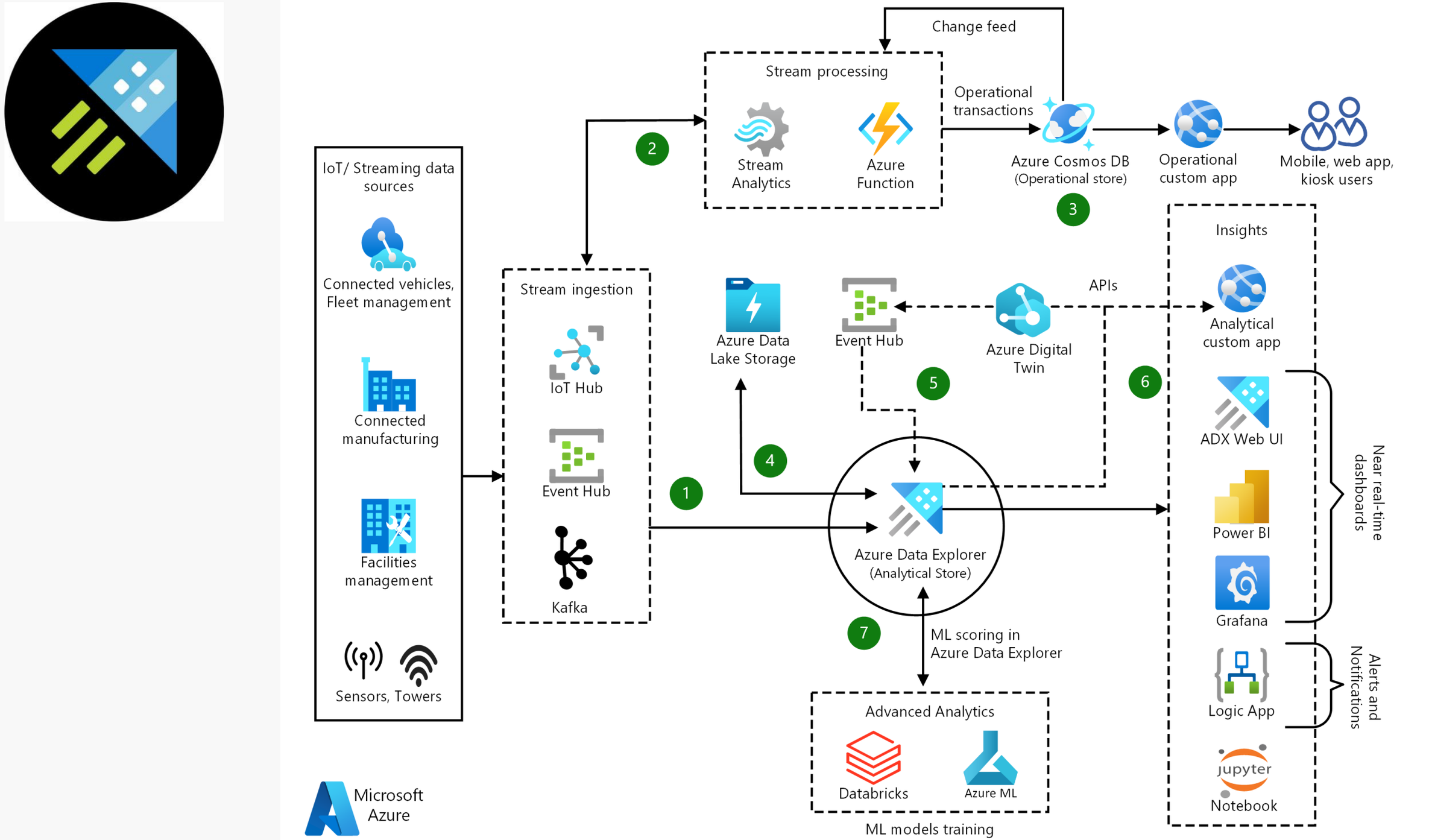
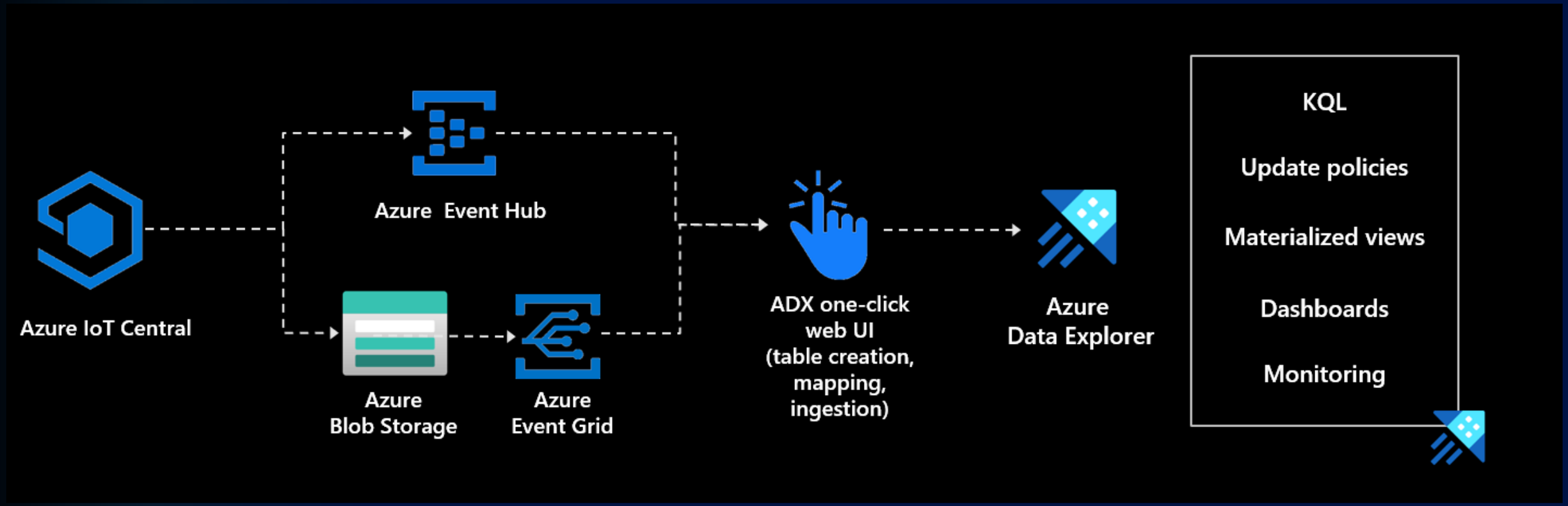
Azure Data Explorer


Change feed
Stream processing
Stream Analytics
Azure Function
Operational transactions
Azure Cosmos DB (Operational store)
Operational custom app
Mobile, web app, kiosk users
IoT/ Streaming data sources
Connected vehicles, Fleet management
Connected manufacturing
Facilities management
Sensors, Towers
Stream ingestion
IoT Hub
Event Hub
Kafka
Azure Data Lake Storage
Event Hub
Azure Digital Twin
APIs
Insights
Analytical custom app
ADX Web UI
Power BI
Grafana
Logic App
jupyter
Notebook
Near real-time dashboards
Alerts and Notifications
Azure Data Explorer (Analytical Store)
ML scoring in Azure Data Explorer
Advanced Analytics
Databricks
Azure ML
ML models training
1
2
3
4
5
6
7
Microsoft Azure

Azure Data Explorer

- ✓ Brinda Análisis en tiempo real.
- ✓ Posee Escalabilidad horizontal.
- ✓ Optimización para datos no estructurados y semiestructurados.
- ✓ Lenguaje de consulta flexible.

DEMO


Azure IoT Central
Azure Event Hub
Azure Blob Storage
Azure Event Grid
ADX one-click web UI (table creation, mapping, ingestion)
Azure Data Explorer
KQL
Update policies
Materialized views
Dashboards
Monitoring

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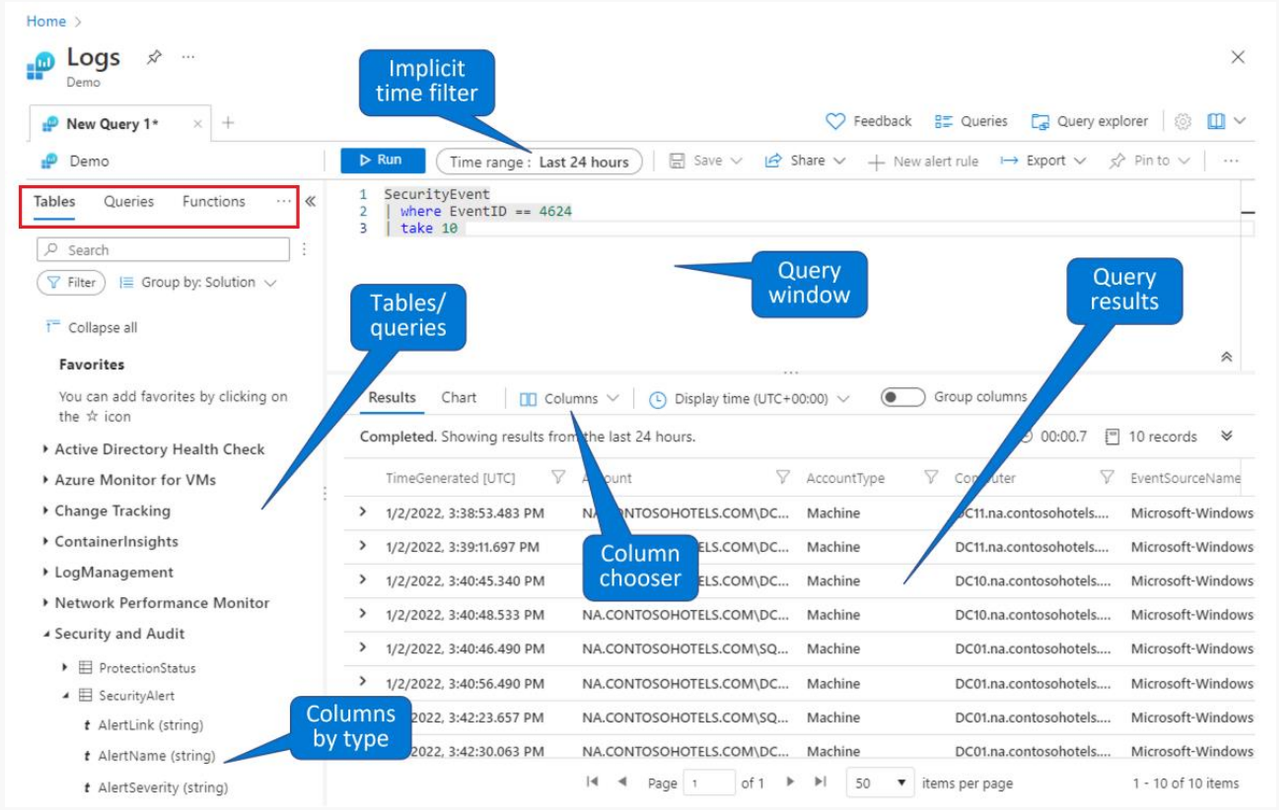
KUSTO QUERY LANGUAGE
KQL

```
.ingest into table AzureDevOpsLog
h'https://gcayom0074.analytics.visualstudio.com/_odata/v3.0-preview/auditLogs'
with
(format = "json",
ignoreFirstRecord = 1,
ignoreLeadingWhiteSpace = 1,
timestampFormat = "yyyy-MM-ddTHH:mm:ss.fffZ")
```

Tabla 1 | Tabla 2 | Buscar | UTC | Almacenado en caché (1.128 s) | 1 registros

ExtentId	ItemLoaded	Duration	HasErrors	OperationId
00000000-0000-0000-0000-000000000000	https://gcayom0074.analytics.visualstudio.com/_od...	00:00:00.2656354	true	dd586091-e2d5-4a



DEMO

CONSULTAS

Call to Action

- Azure Data Explorer@ https://learn.microsoft.com/es-mx/azure/data-explorer/
- Microsoft Learn @ https://learn.microsoft.com/es-mx/

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