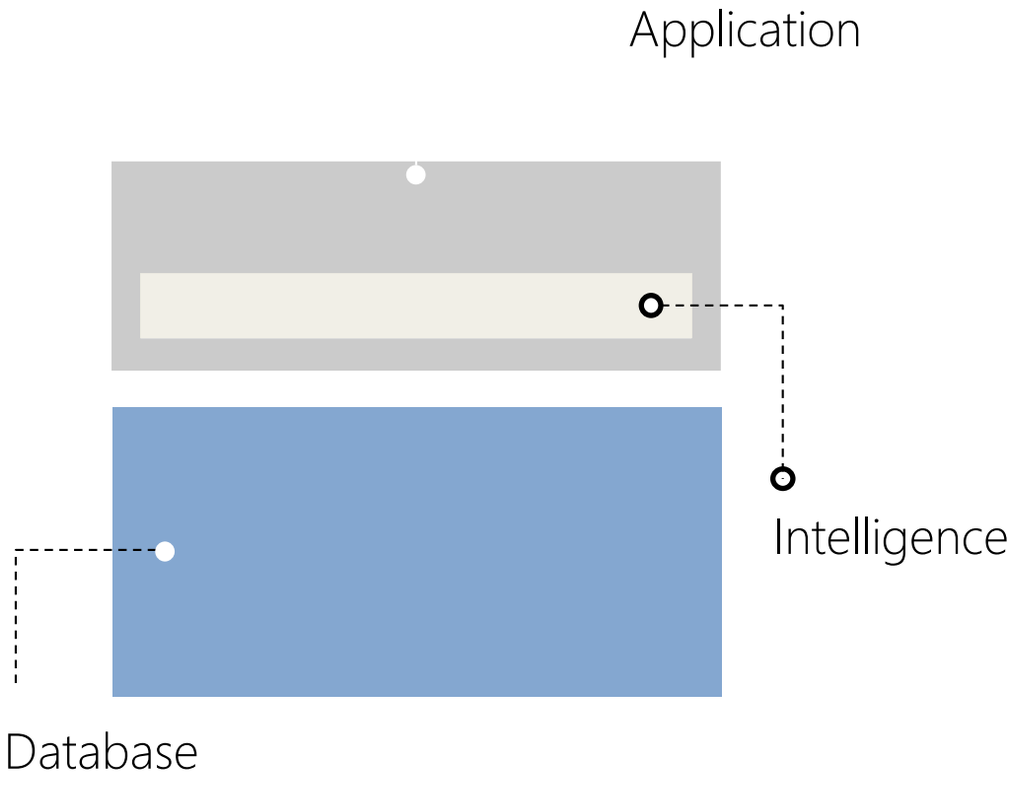
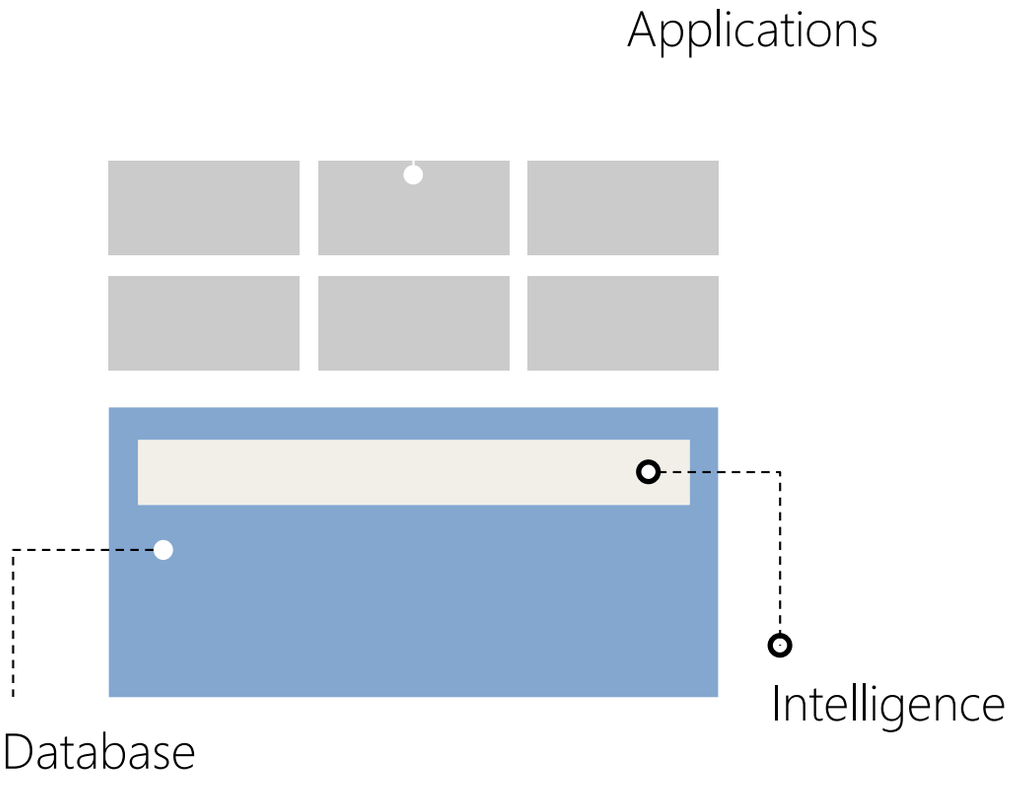
In-data base advanced analytics

Pushing intelligence to where data lives



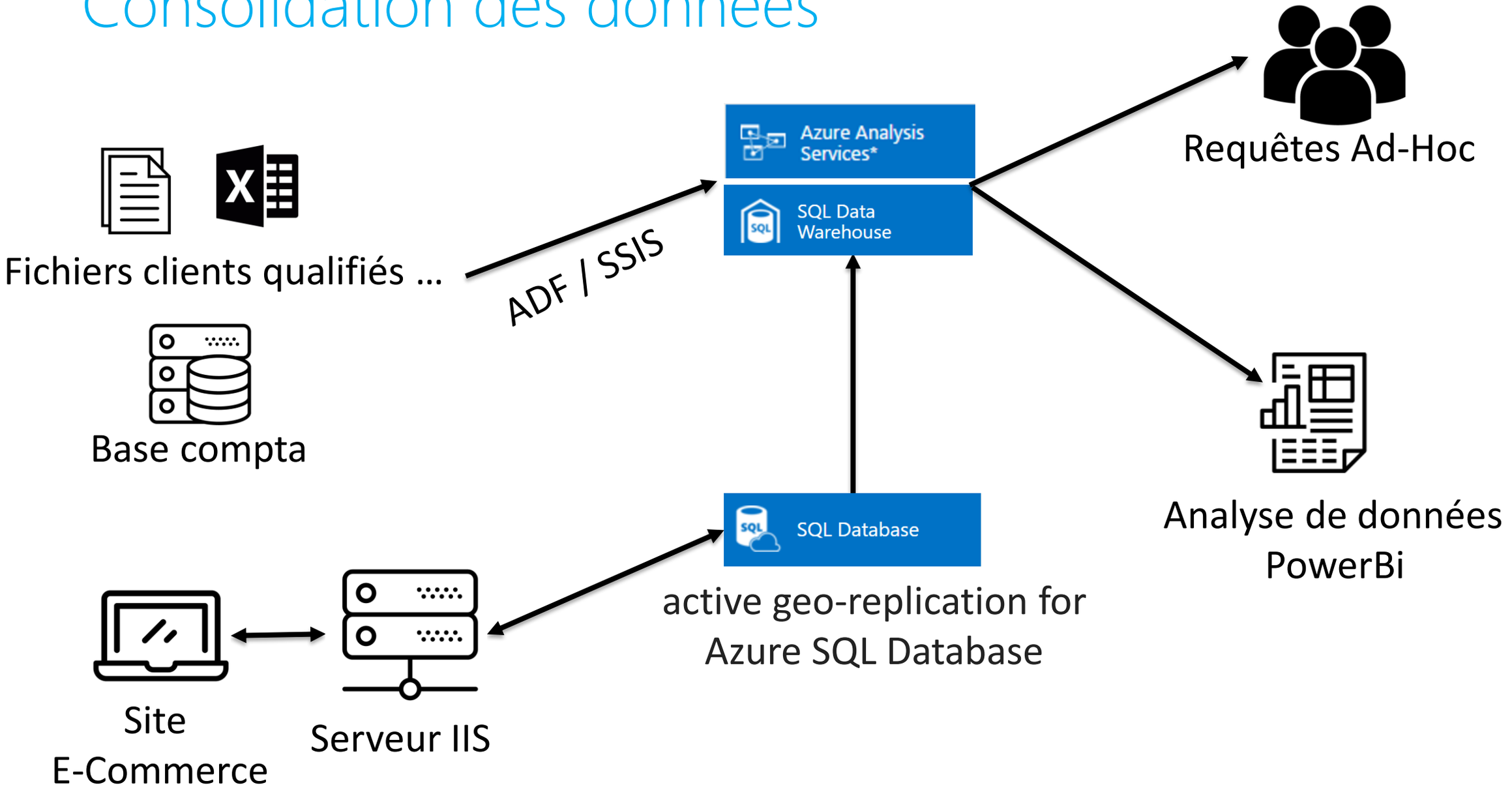


Des données en Mode PAAS

- Azure SQLDB
  - Performance évolutive à la demande sans interruption de service de votre application
  - Restauration à une date précise
  - Réplication géographique avec accès en lecture seule
  - La puissance de SQL Server
  - Facilité de migration depuis l'existant
- DocumentDB *(*NoSQL)
  - Faible latence
  - Model free
  - Support SQL / Javascript server side
- Azure Table
  - Peu cher
  - API

DEMO
Migrer vers Azure SQL Database

Consolidation des données



Outil de chargement Azure Data Factory ?

- Azure Data Factory
  - Cloud Only
  - Permet de gérer des flux de données
  - Depuis le cloud ou onprem grâce à une Gateway
  - Powershell, REST API, Fichier JSON
- SSIS
  - N'existe pas en PaaS
  - Permet de gérer des flux de données ainsi que des flux de contrôle
  - GUI rîche

DEMO
Azure Data Factory

Azure Analysis Services

Azure Analysis Services is based on the proven analytics engine that has helped organizations turn complex data into a trusted, single source of truth for years

Proven technology

Powerful, proven tabular models built from SQL Server 2016 Analysis Services

Cloud-powered

Easy to deploy, scale, and manage as a platform-as-a-service solution

Built for hybrid data

Access and model data on-premises, in the cloud, or both

Interactive visualization

Quick, highly interactive self-service data discovery with support of major data visualization tools

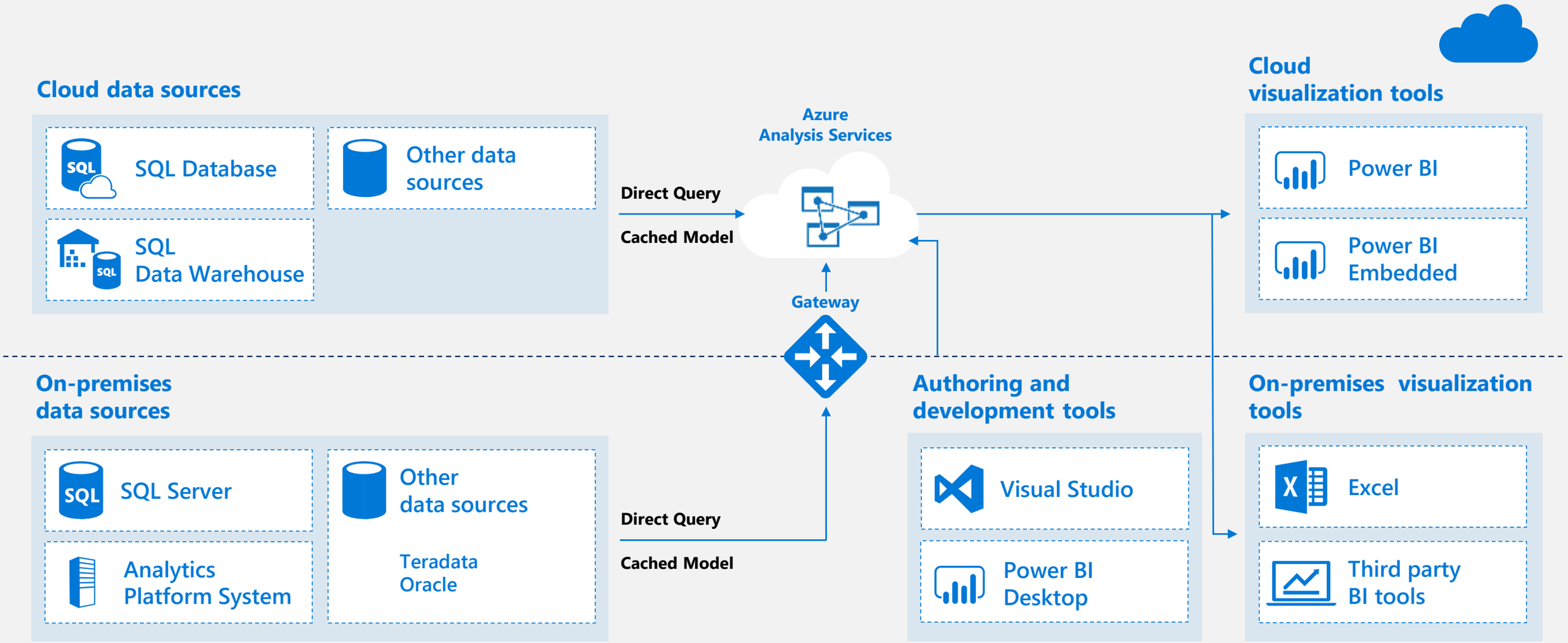
Note: not all capabilities available at public preview

SSAS/Azure Analysis Services Cubes

Reasons to report off cubes instead of the data warehouse:

- Semantic layer
- Handle many concurrent users
- Aggregating data for performance
- Multidimensional analysis
- No joins or relationships
- Hierarchies, KPI's
- Security
- Advanced time-calculations
- Slowly Changing Dimensions (SCD)
- Required for some reporting tools

Azure Analysis Services Architecture



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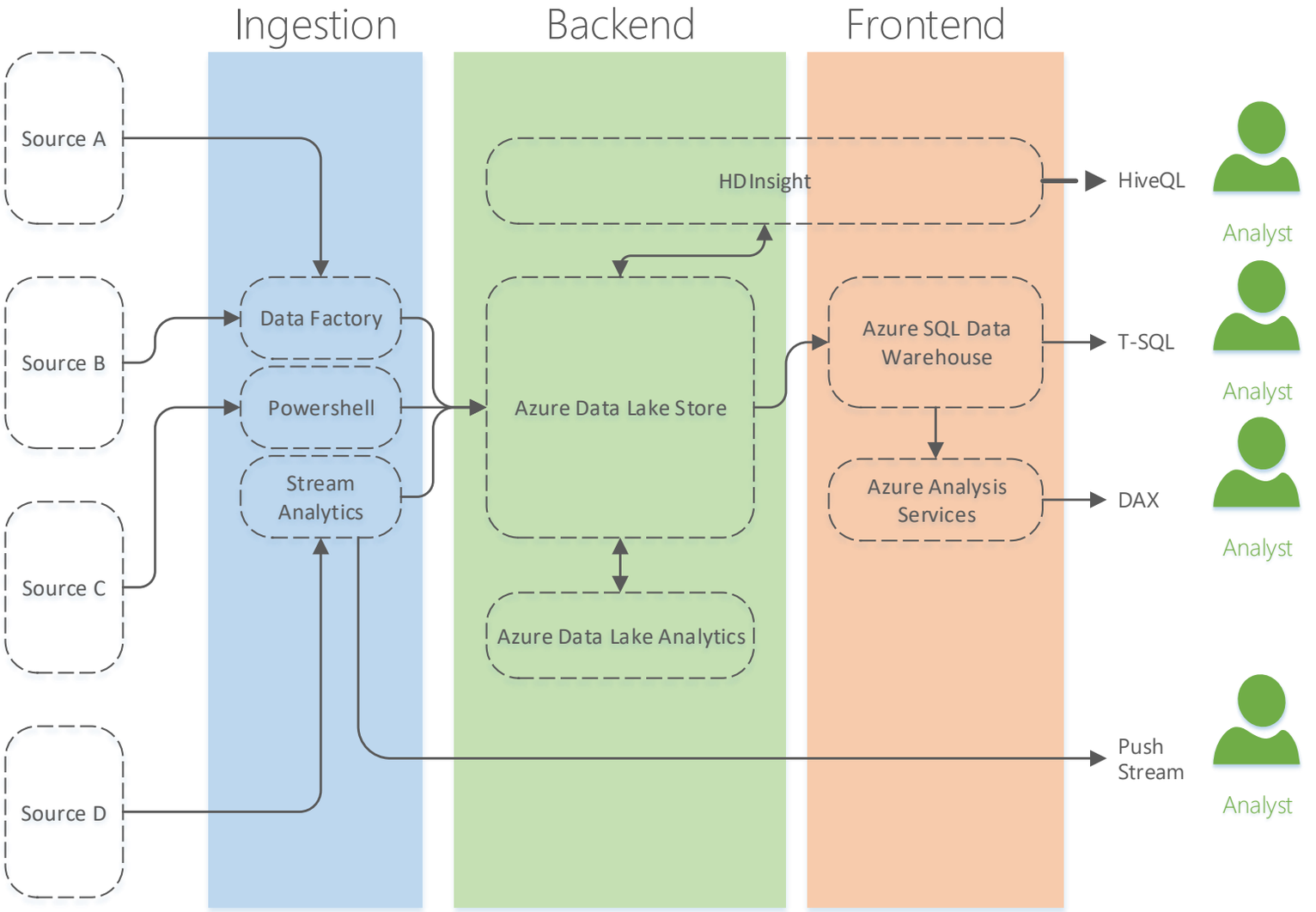
DEMO
Azure Analysis Services

Autres choix d'architecture

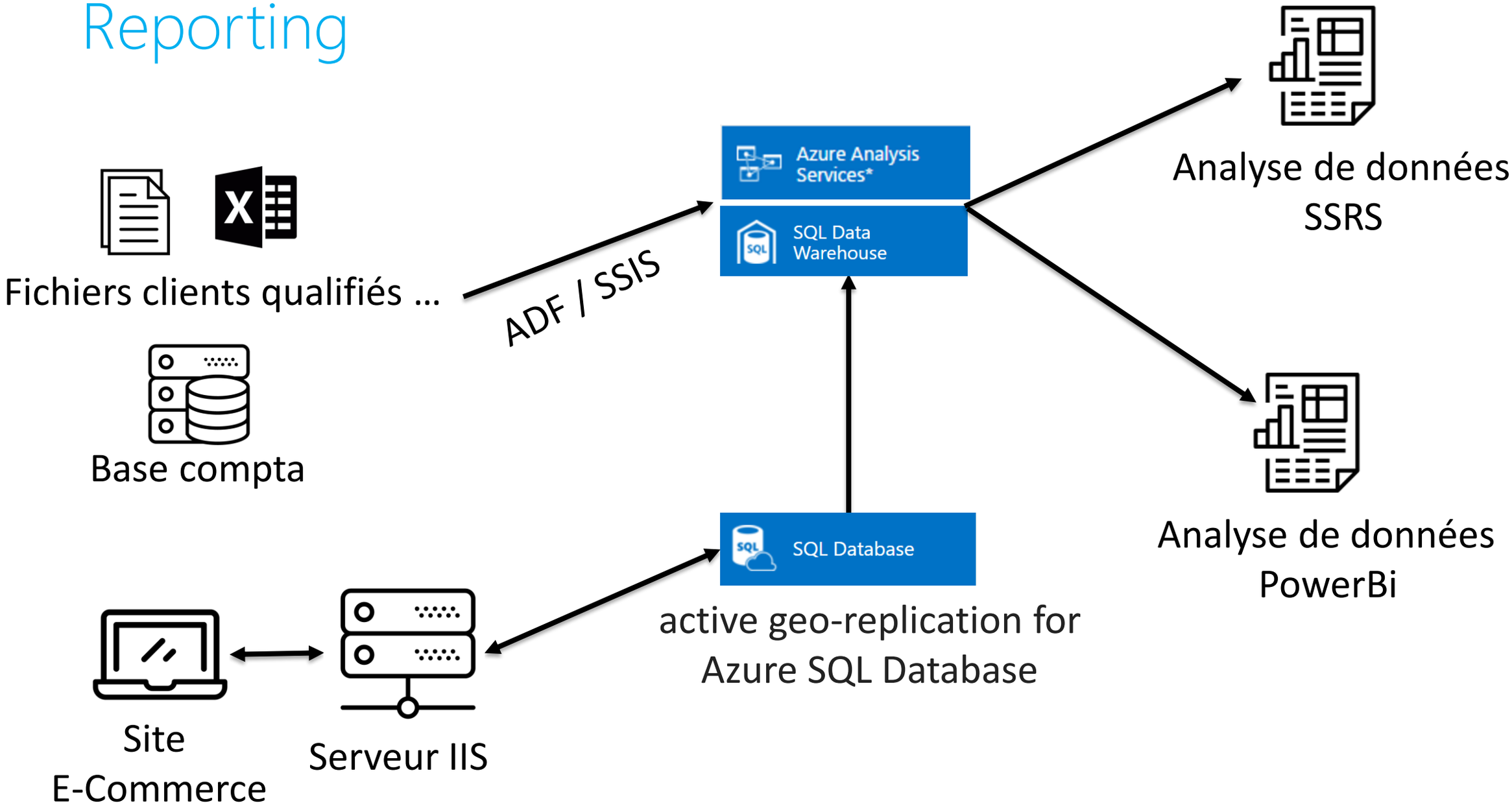
- HDInsight is a viable frontend analytics service
- Security is enabled via AAD
- Share a single copy of data across multiple clusters

Decision Tree

https://biz-excellence.com/2016/08/30/big-data-dt/

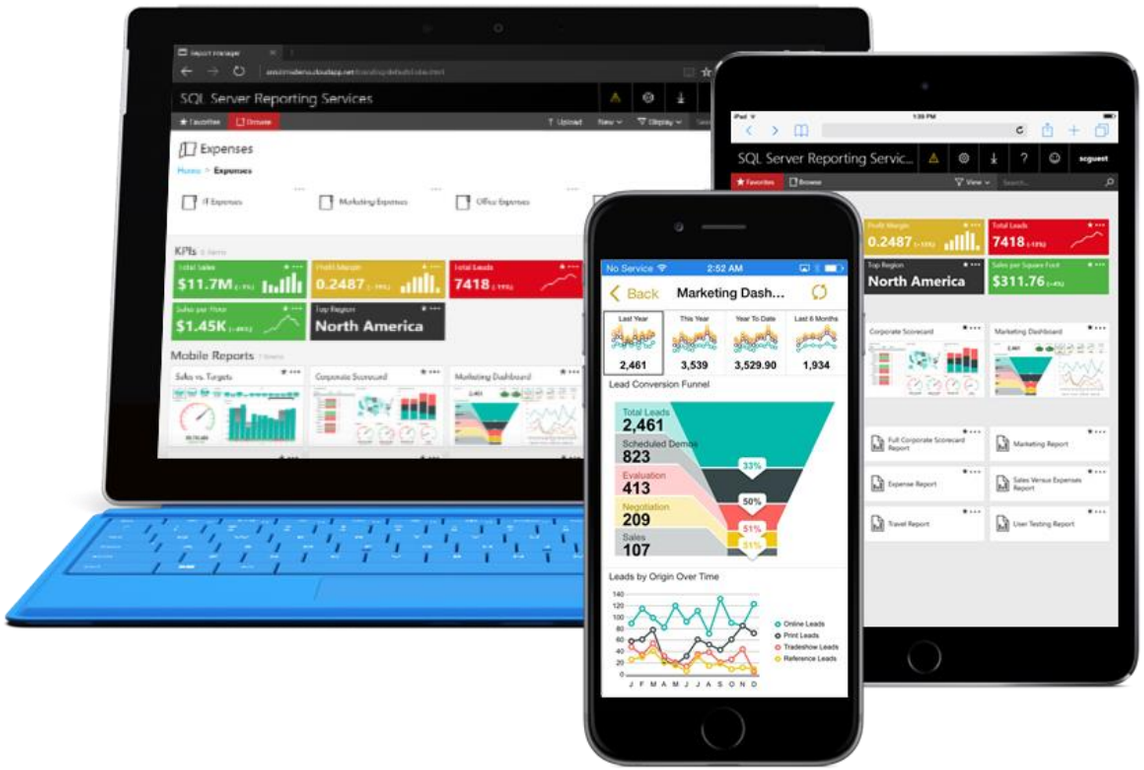


Reporting


Fichiers clients qualifiés …
Base compta
ADF / SSIS
Azure Analysis Services*
SQL Data Warehouse
SQL Database
active geo-replication for Azure SQL Database
Analyse de données SSRS
Analyse de données PowerBi
Site E-Commerce
Serveur IIS

SQL Server Reporting Services 2016

On-premises solution for deploying and managing reports



Paginated reports

Design beautiful documents using updated tools and new features

Mobile reports

Create responsive, interactive reports optimized for mobile devices

New web portal

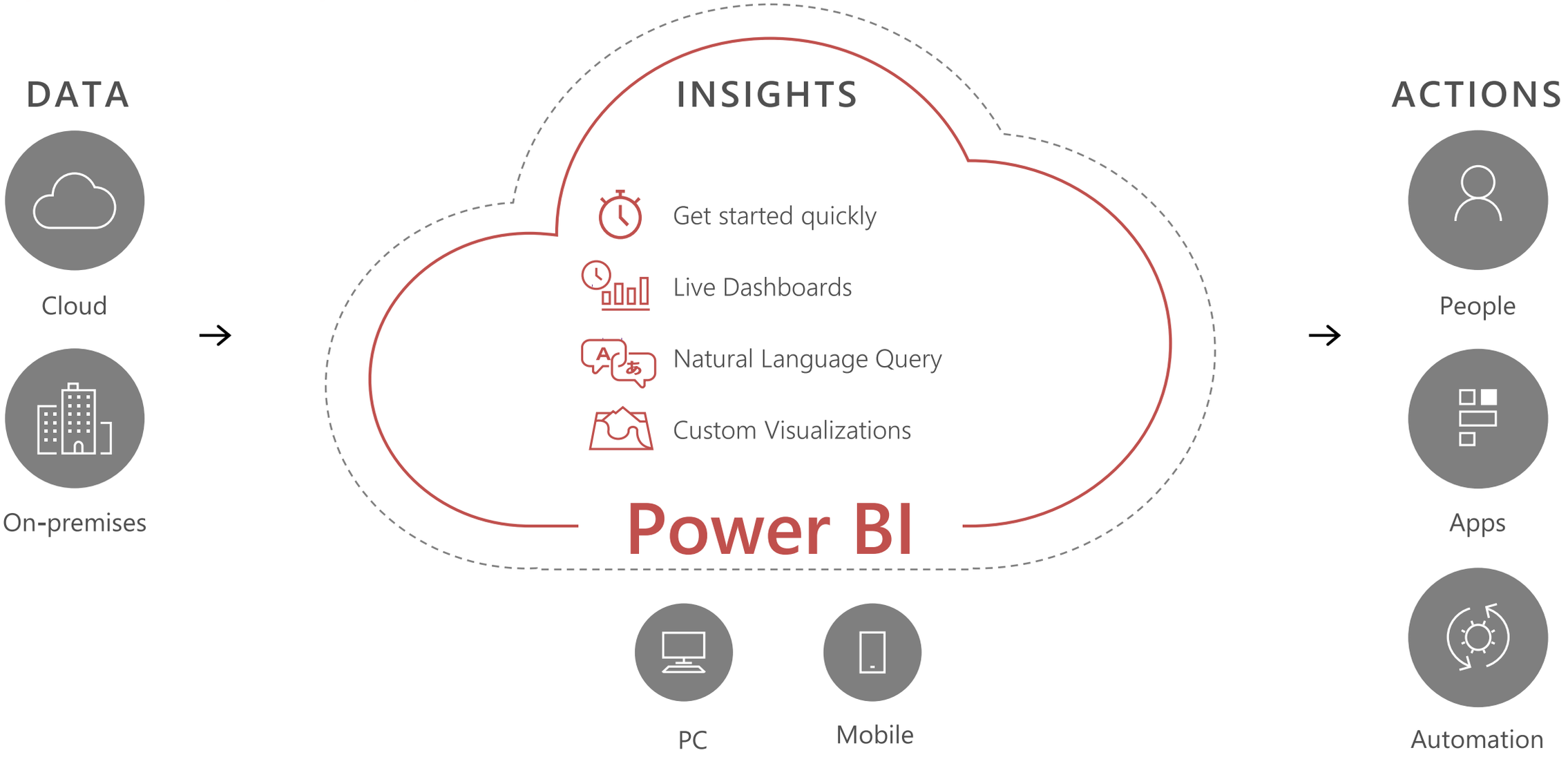
Consume both types of reports in one web portal using modern browsers

To come

Power bi rapport in Reporting Services

Power BI: experience your data

Any data, any way, anywhere



End-to-end mobile BI on any device

NASDAQ

Reports in minutes vs days
+ PB scale with SQL Server

Lightning fast with **in-memory** built-in

Powerful modeling + direct query

Rich visualizations using Power BI or revamped Reporting Services

Online and offline access

Windows iOS Android HTML5

DEMO
Power BI + Azure Analysis Services