

# SAP HANA Vora

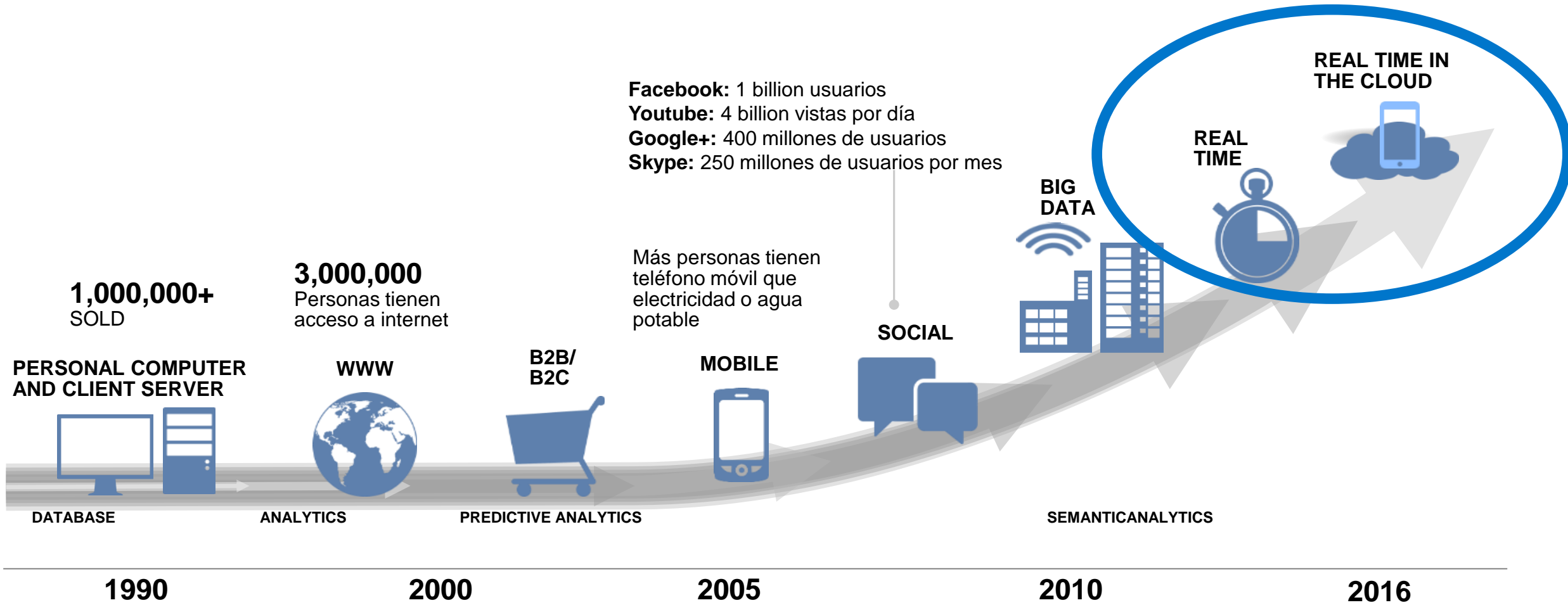
Llega el análisis en tiempo real  
al mundo Big Data y Cloud



#SAPForum

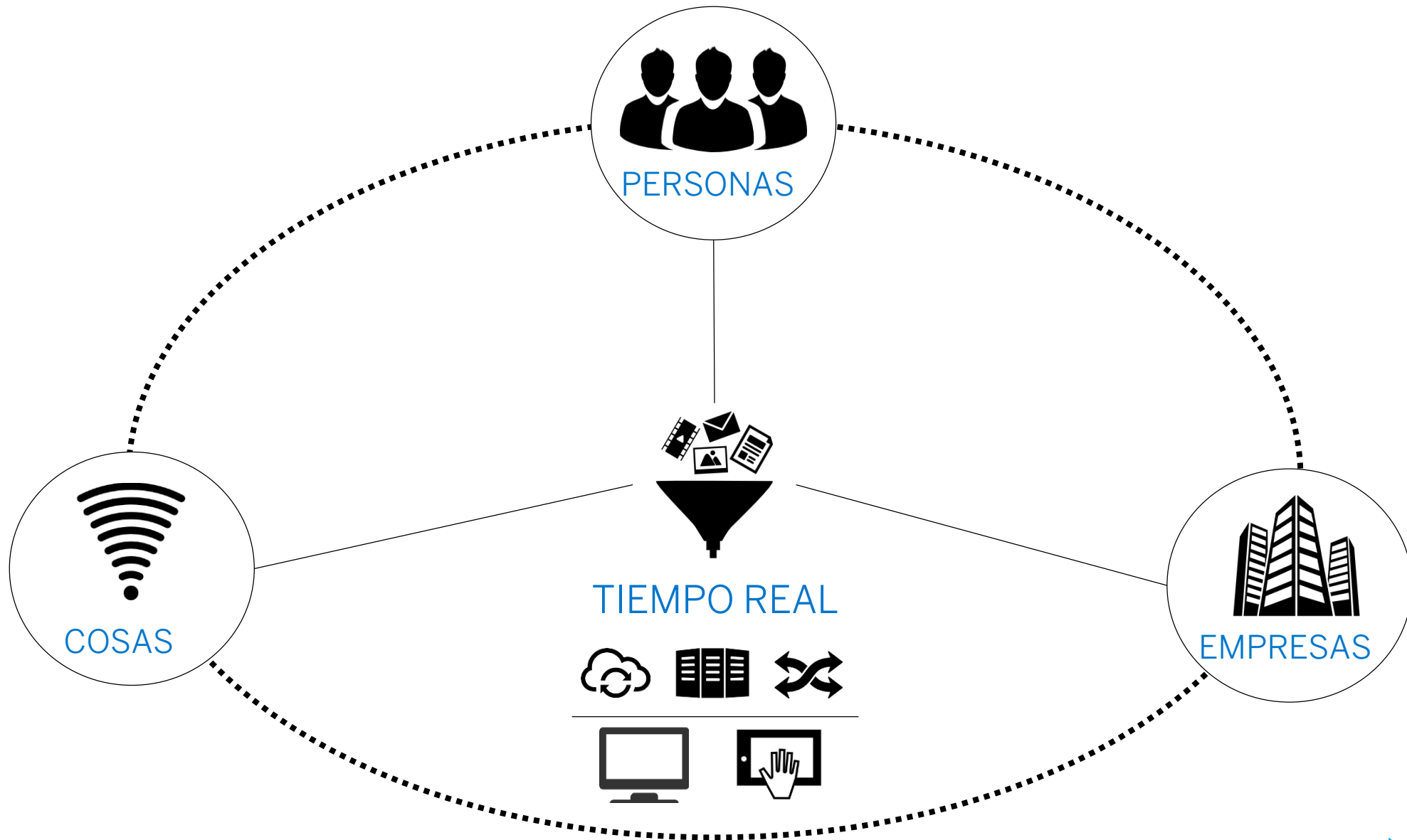


# DÓNDE ESTAMOS EN LA EVOLUCIÓN TECNOLÓGICA



El mundo se mueve





Fuentes



OLTP



Estructurados



Streams

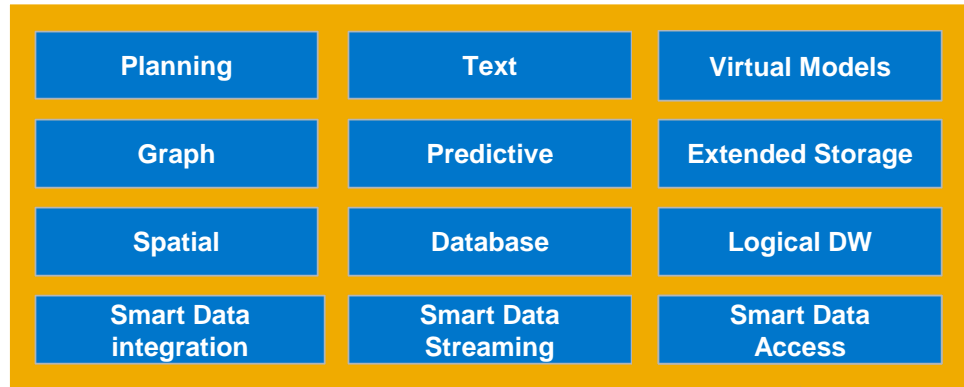


No estructurados



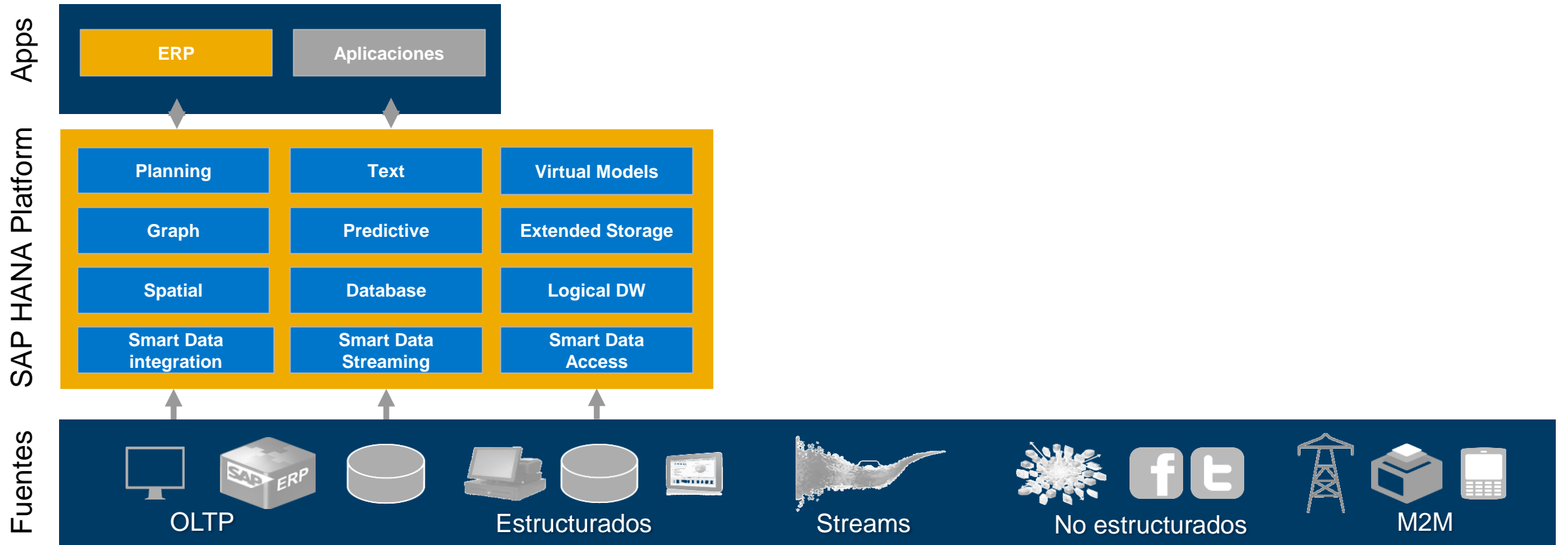
M2M

SAP HANA Platform

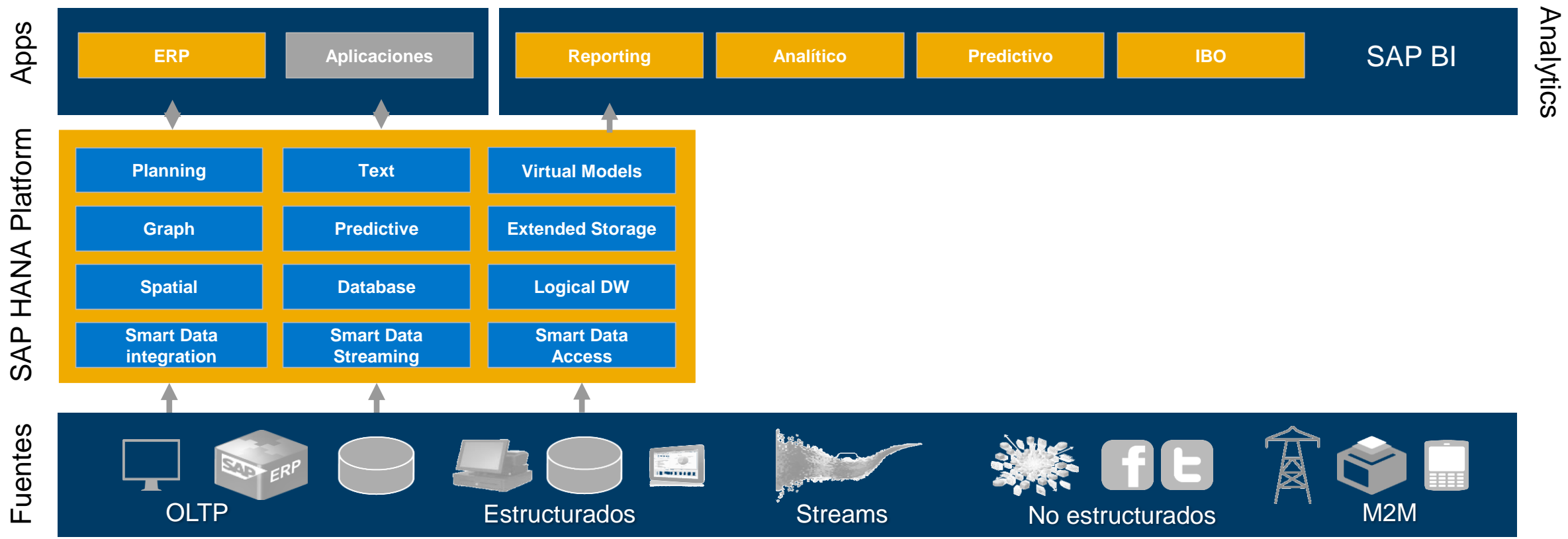


Fuentes



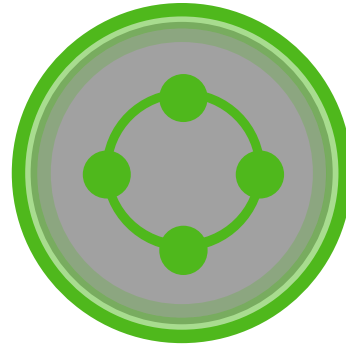








Datos de sensores

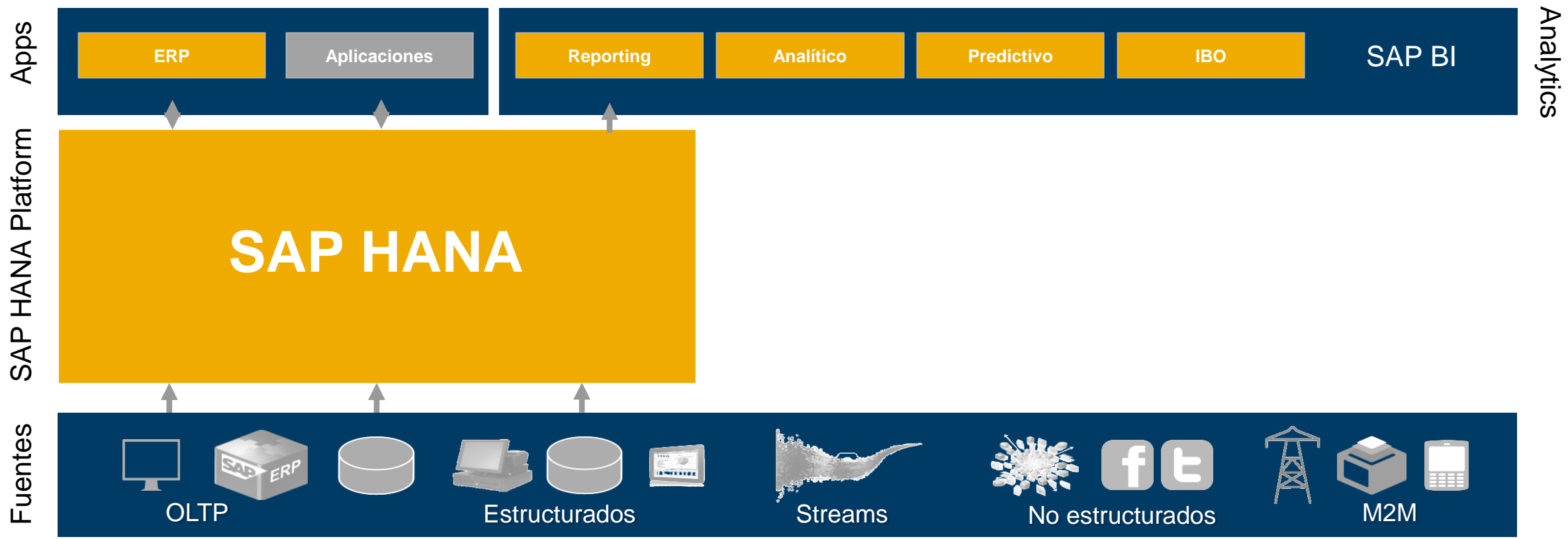


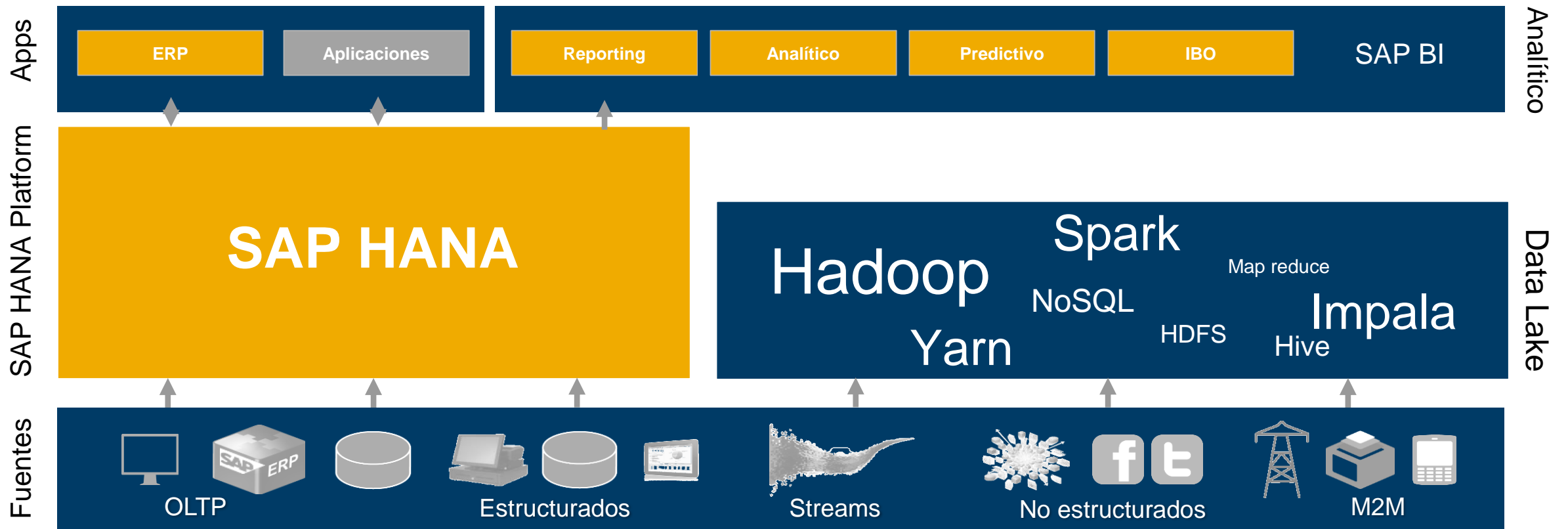
Redes Sociales



Big Data ímplicito









Escalable

Efectivo en costes

Preparado para fallos

Flexible

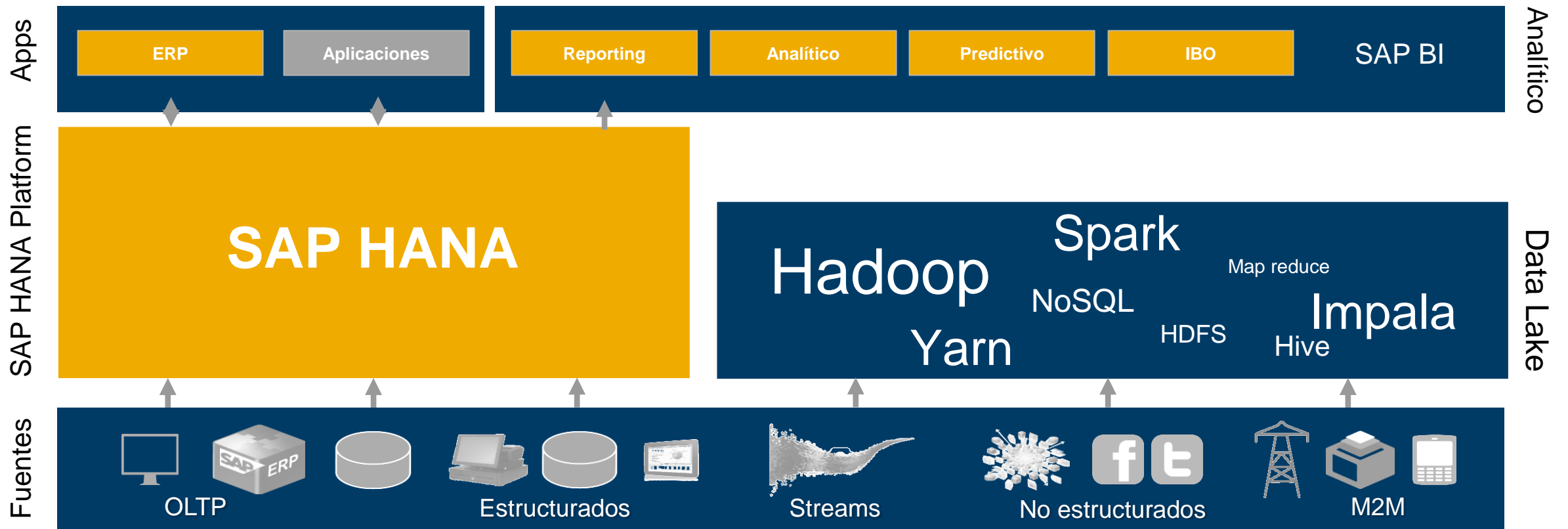


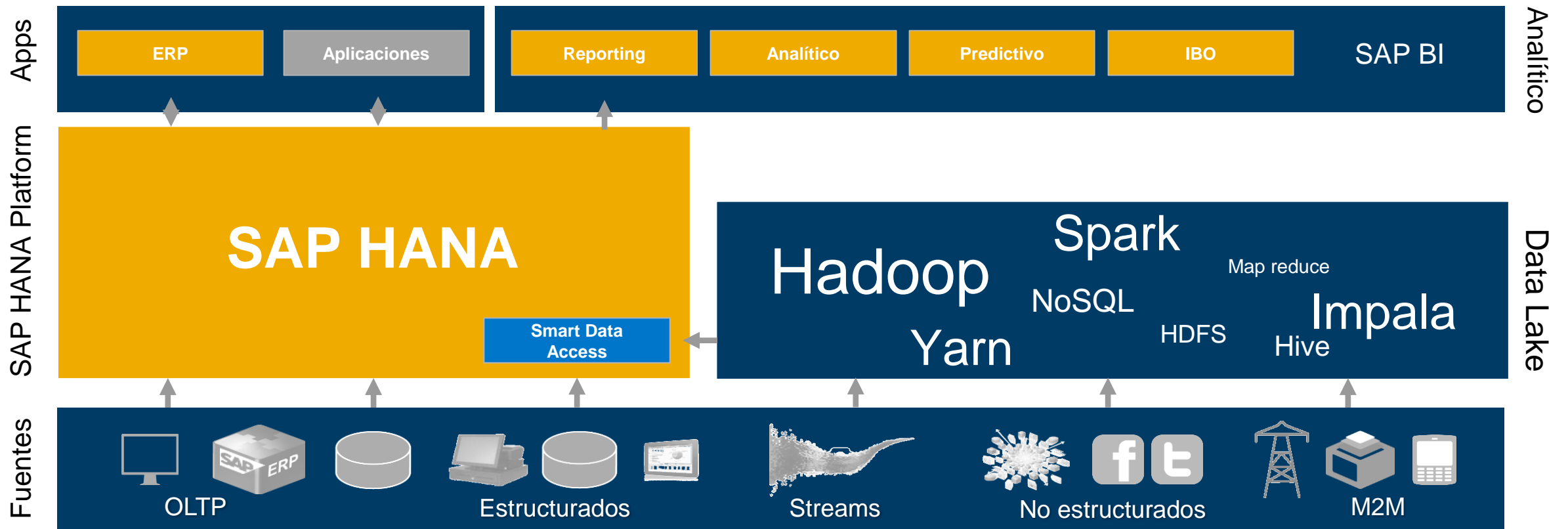
No 'Enterprise'

Seguridad y Gobierno

Conocimientos avanzados

Complejo





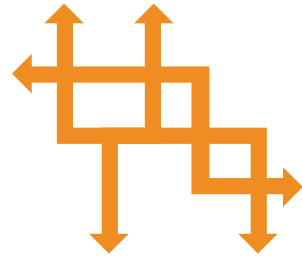


# DÓNDE ESTÁ EL 'GAP'

## Separación entre el IT Tradicional y el Digital



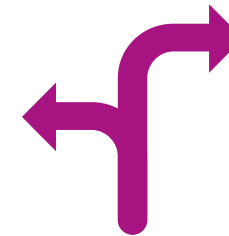
Aplicaciones  
Empresariales y  
Analíticas



Demasiado Complejo



Demasiado  
Lento



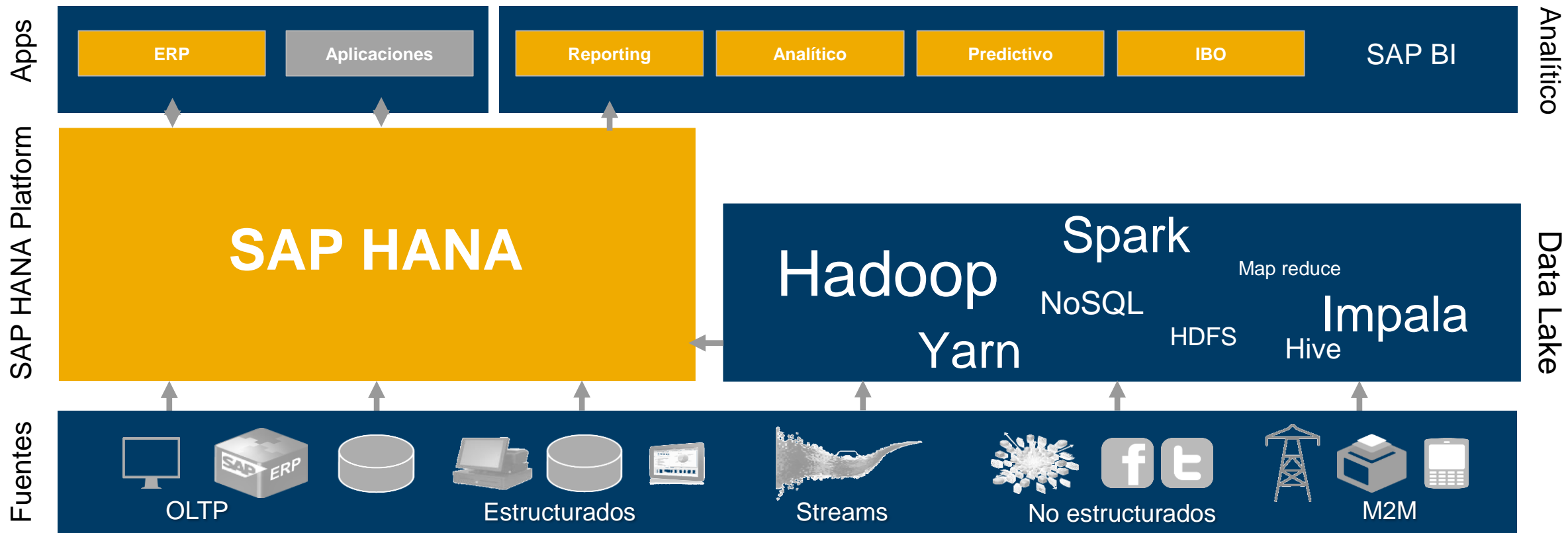
Difícil trabajar  
conjuntamente

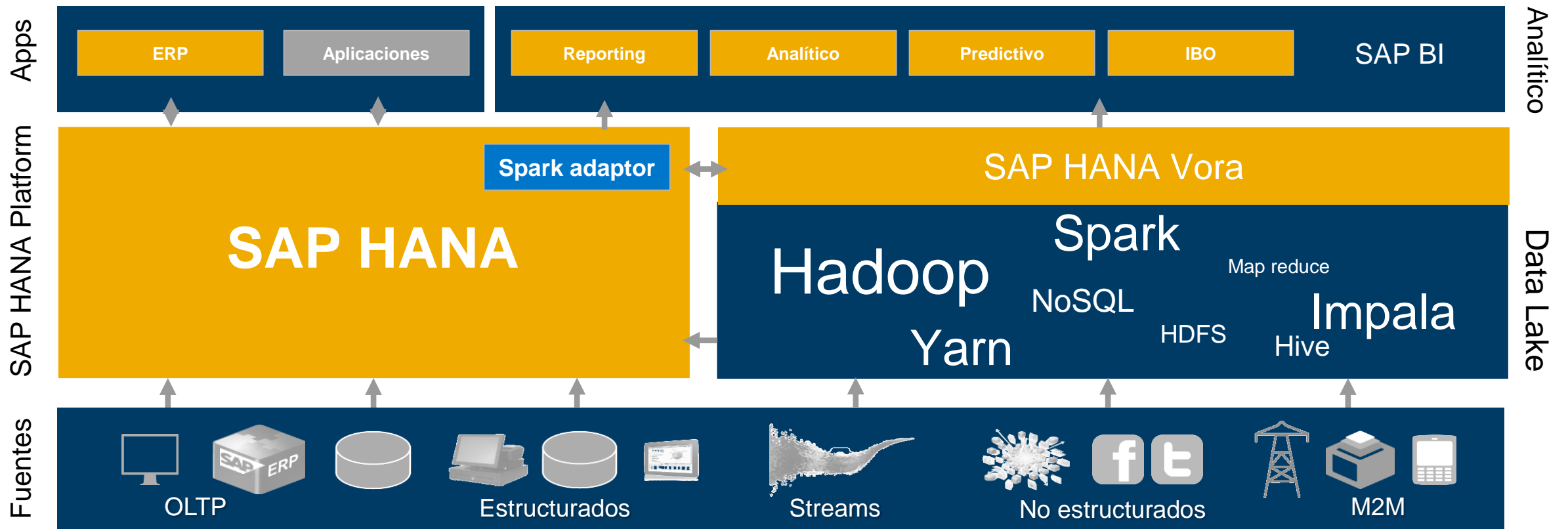
BIG DATA  
IOT

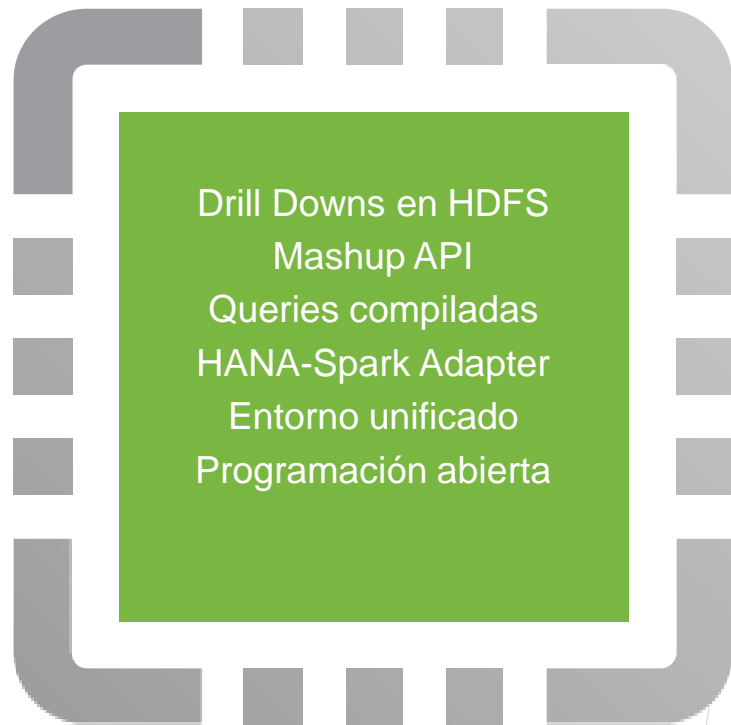
Aplicaciones  
Empresariales y  
Analíticas

# SAP HANA *Vora*

BIG DATA  
IOT







SAP HANA Vora es un 'engine' analítico que mejora y extiende el 'framework' Apache Spark para proporcionar análisis interactivo avanzado sobre Hadoop.



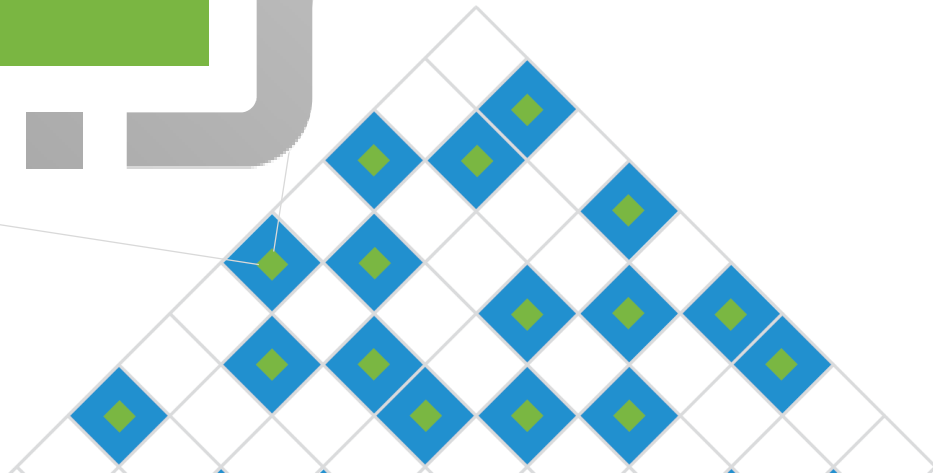
Tomar decisiones más precisas



Democratizar el Acceso a los datos

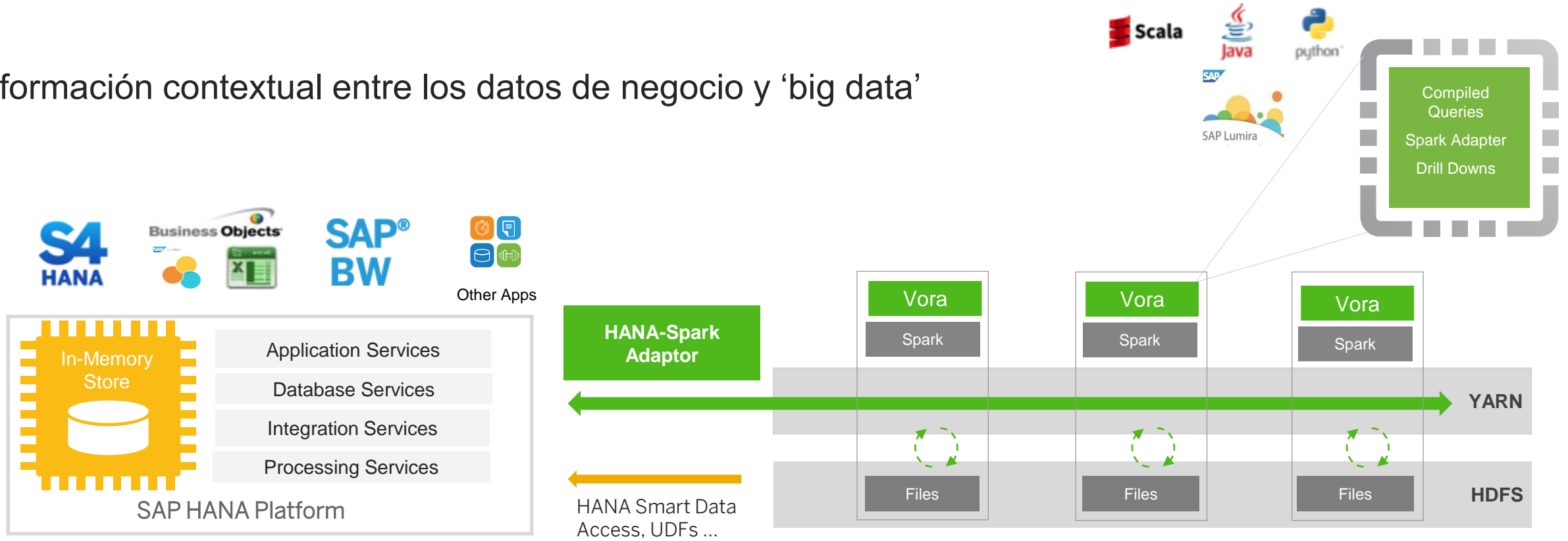


Simplificar la gestión del Big Data



Cualquier Cluster Hadoop

## Información contextual entre los datos de negocio y 'big data'



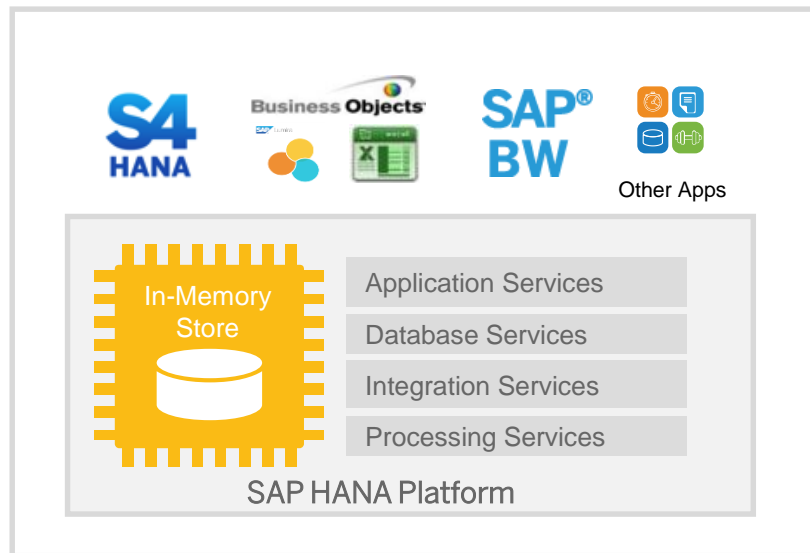
Adaptador HANA-Spark para mejora de rendimiento con entornos distribuidos

Queries compiladas permiten a las aplicaciones y herramientas de análisis ser más eficientes accediendo a datos distribuidos por los nodos

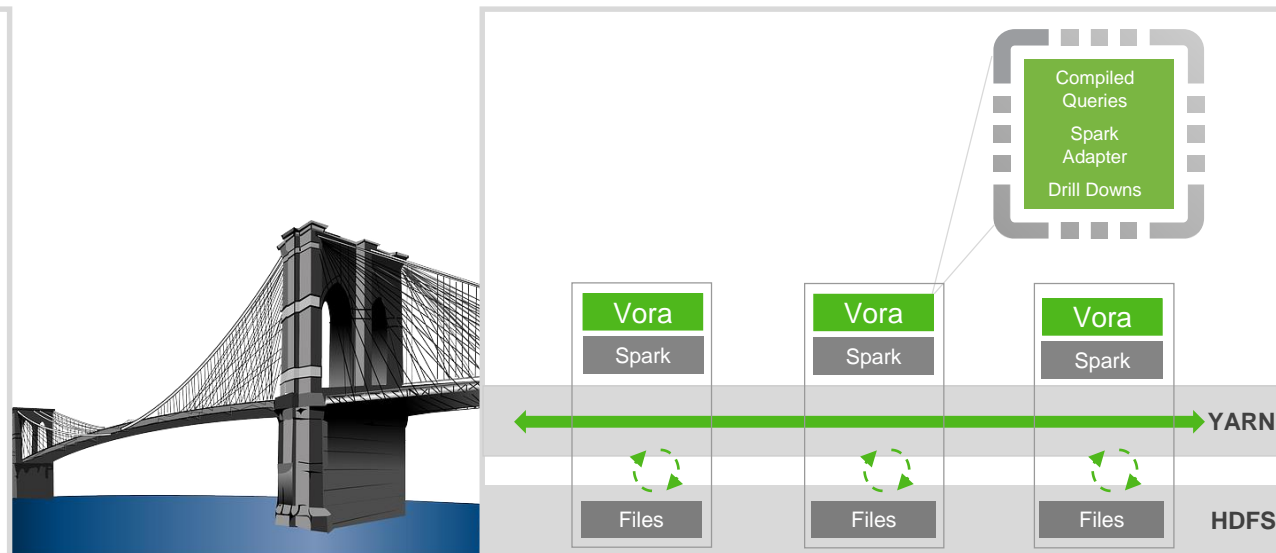
Experiencia OLAP sobre Hadoop para análisis profundo en big data permitiendo por ejemplo drill-down en datos HDFS

## Puente entre el mundo empresarial estructurado y el Big Data!

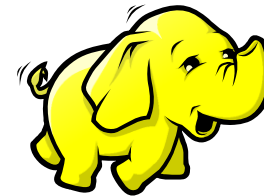
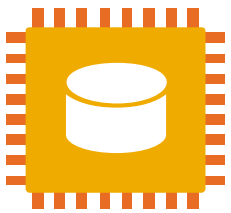
### Aplicaciones empresariales



### Big Data

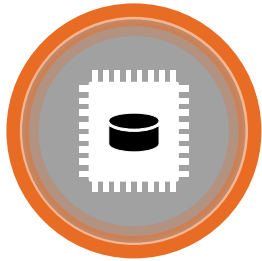


SAP HANA

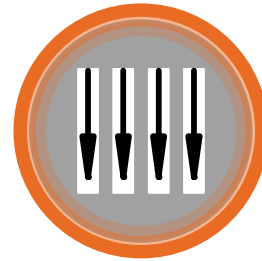


- 
- Añade funcionalidades para las aplicaciones empresariales
    - Jerarquías
    - Análisis y modelos OLAP
  - Rendimiento SQL sin precedentes
  - Acceso federado entre HANA y Hadoop
  - Herramientas





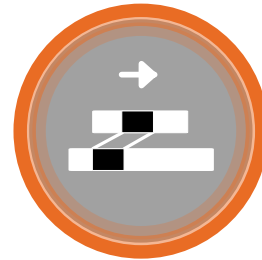
En memoria



SQL Columnar



Compresión Columnar



Algoritmos de Caché



Procesamiento paralelo



Generación de código

## Formatos de ficheros soportados:

- Parquet, ORC, CSV

## Funcionalidad OLAP soportada:

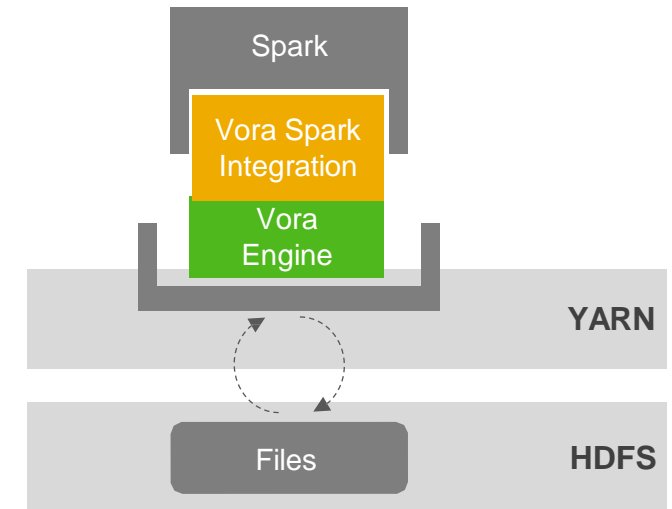
- Procesamiento nativo de Jerarquías

## Rendimiento

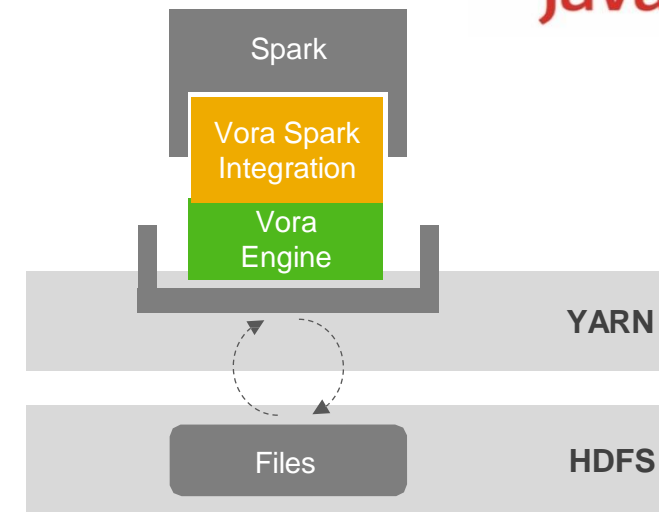
- Procesamiento de consultas en memoria compiladas con LLVM
- 'Push down'

## Conectividad a sistemas empresariales:

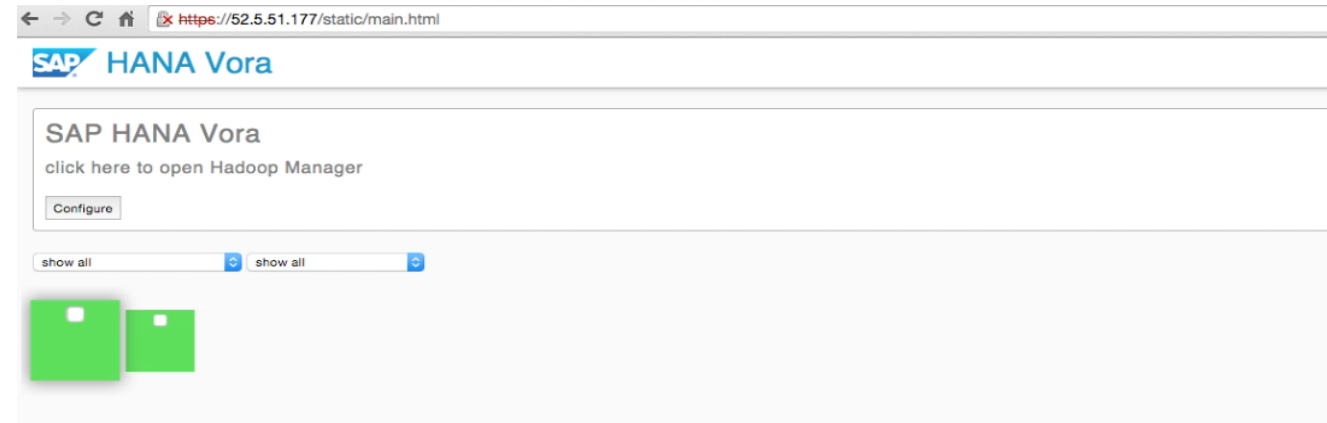
- HANA
- Interfaces para integración Spark fácilmente extensible



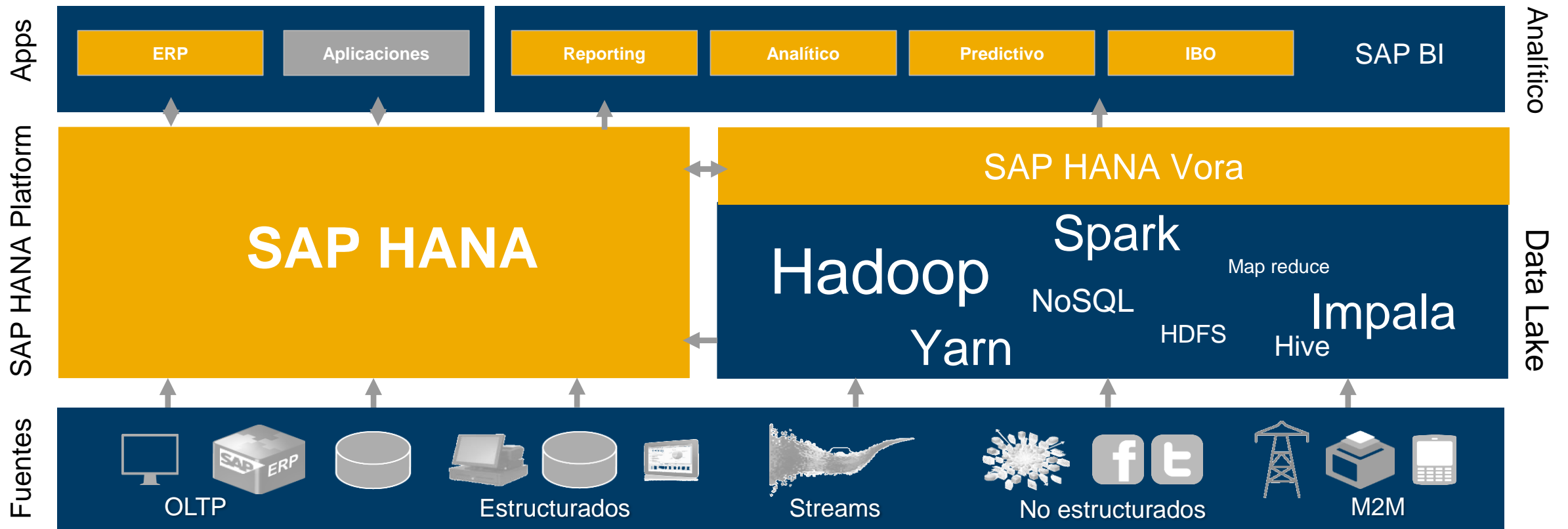
- Todas las herramientas compatible SPARK
- Scala, Java, Python, R.
- Lumira
- Todas las herramientas compatibles con thrift
- Zeppelin y otros notebook como Jupyter
- ....

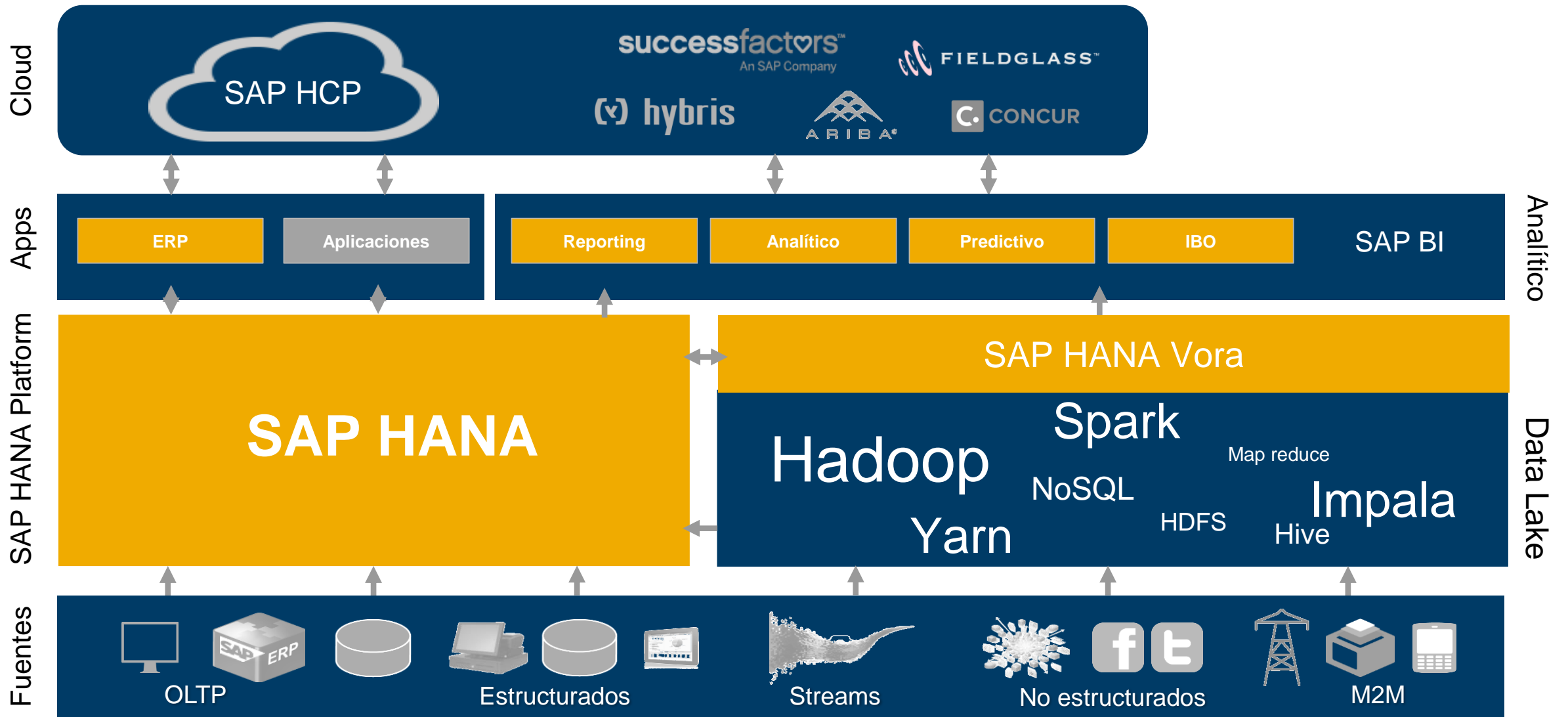


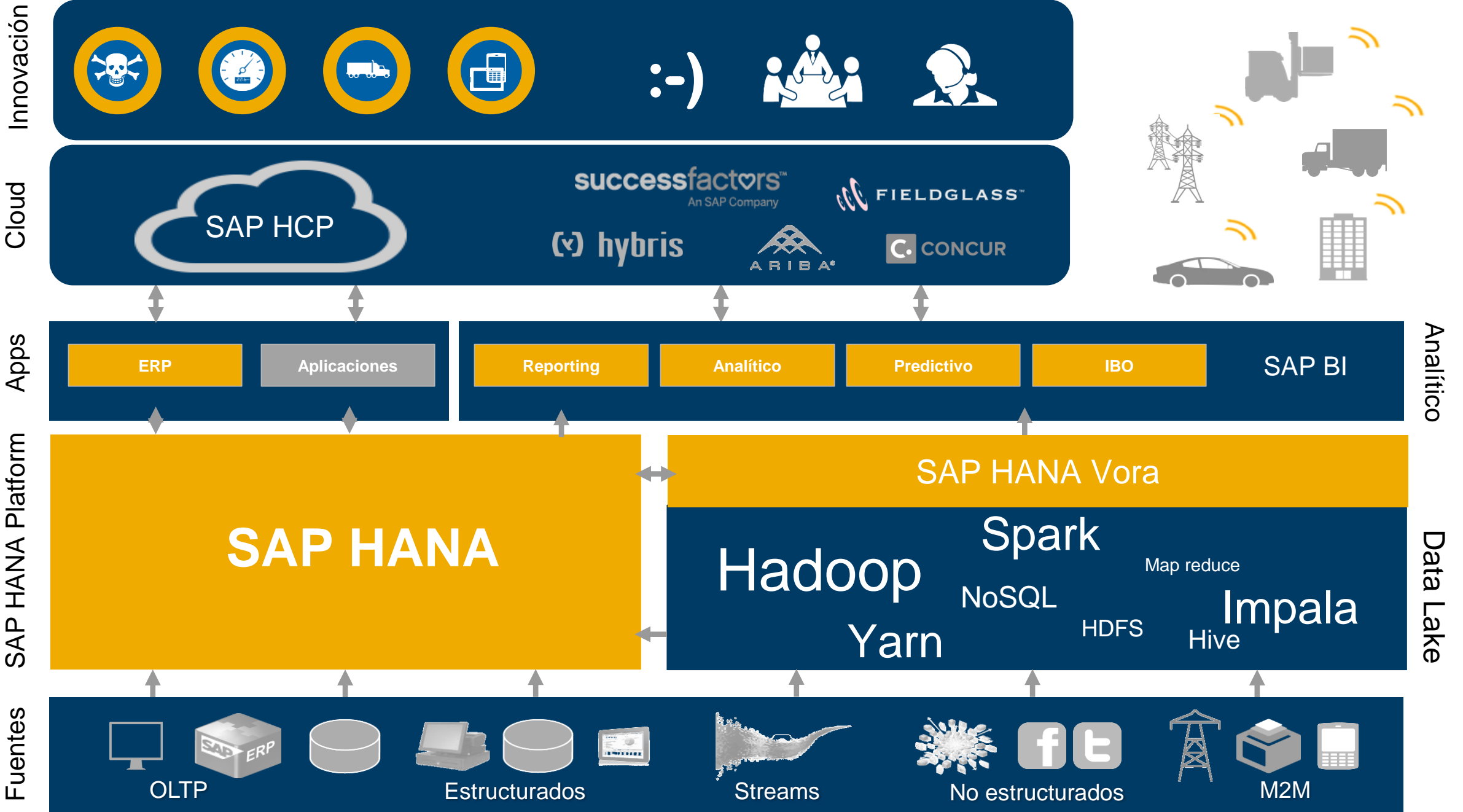
- Disponible en AWS similar a HANA One
- Limitada solamente para escenarios no productivos
- Incluido Hortonworks HDP2.3, Spark1.4 y Vora 1.0



ID	i-22c7f4f0
Size	m3.2xlarge
Region	us-east-1
Start time	2015-08-27T03:54:21Z







# Industria 4.0





# Marketing Personalizado



# Ciudades inteligentes



Ofertas en tiempo real

BATTLESTAR  
GALACTICA  
ONLINE



# IOT para deportes



# Medicina personalizada



Home / Solutions / Data Management / SAP HANA Vora

## SAP HANA Vora

Get valuable business context with SAP HANA Vora – an in-memory query engine for Apache Spark and Hadoop.

Reveal unprecedented business context by combining enterprise and Hadoop data – using SAP HANA Vora. This in-memory query engine runs on the Apache Spark framework, so you can:

- ✓ Use the power of in-memory to analyze Big Data stored in Hadoop
- ✓ Make more precise decisions through greater contextual awareness
- ✓ Democratize data access and help data scientists improve OLAP analysis on Hadoop data
- ✓ Simplify Big Data ownership by combining SAP HANA and Hadoop data in one landscape





# Gracias

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