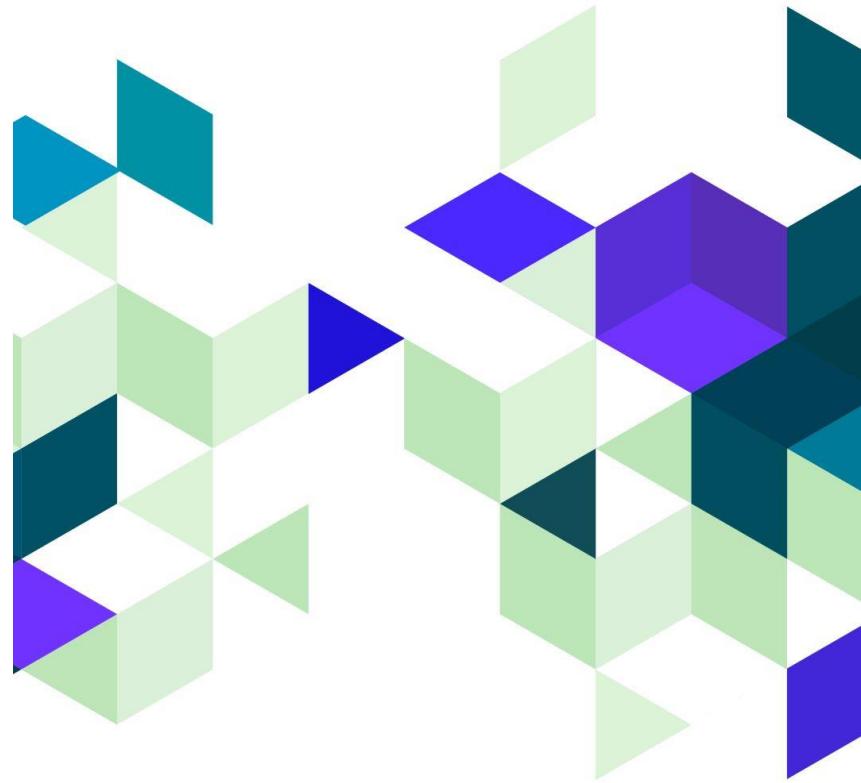


AZURE BIG DATA IA





INDICE

- Arquitectura Hadoop
- Arquitectura Microsoft Azure
- Soluciones Microsoft Azure para ML, IA y BigData
- Azure-BigData. Almacenamiento y procesamiento en la nube Azure
- Azure-IA. Algoritmos y capacidades de la plataforma Azure-IA
- Azure-ML. Algoritmos y capacidades de la plataforma Azure-ML



PRESENTACIÓN

La creación de datos, a punto de explotar

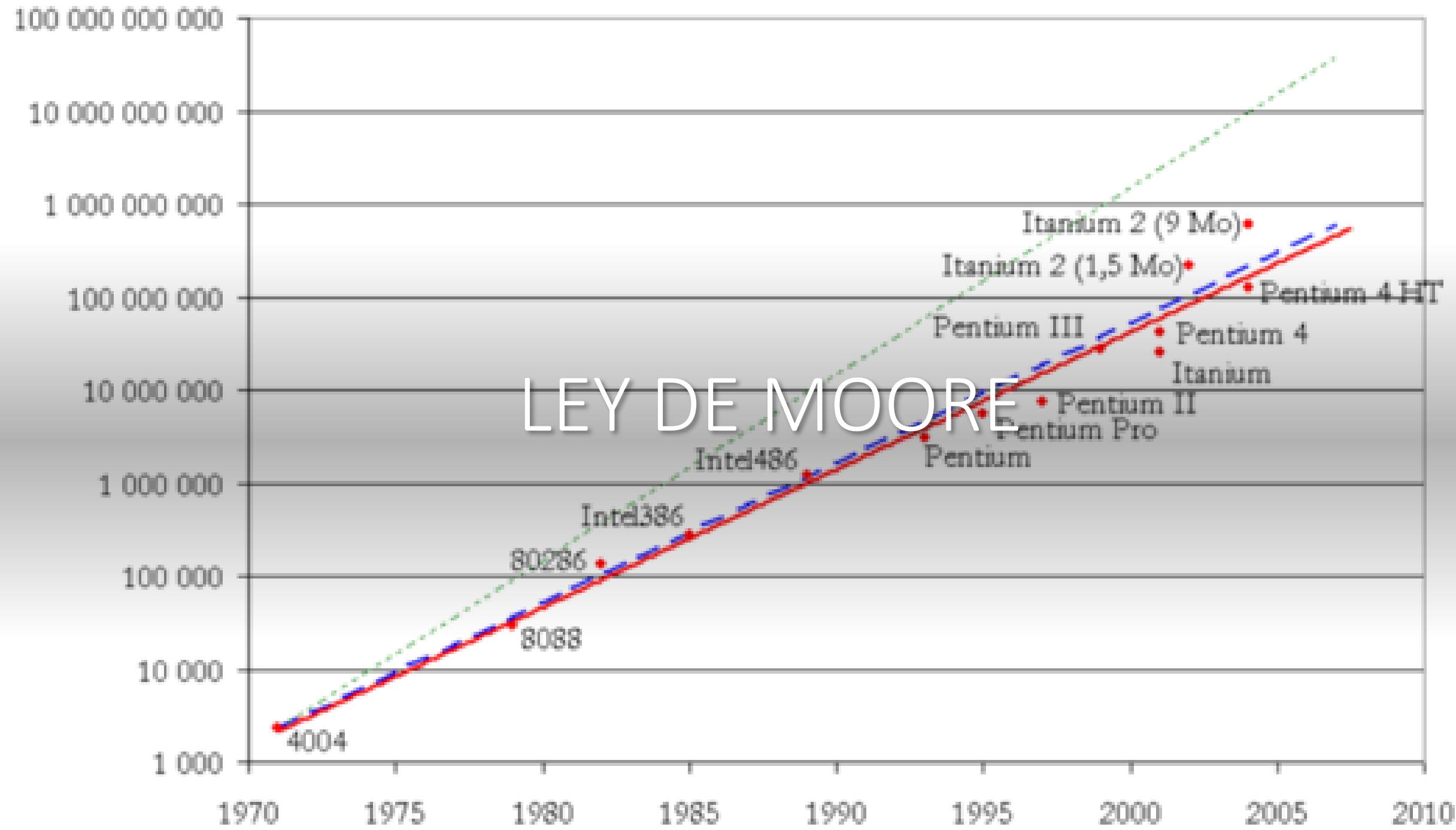
Cantidad real y prevista de datos generados en todo el mundo (en zettabytes)



@Statista_ES

Fuente: Statista Digital Economy Compass 2019

statista

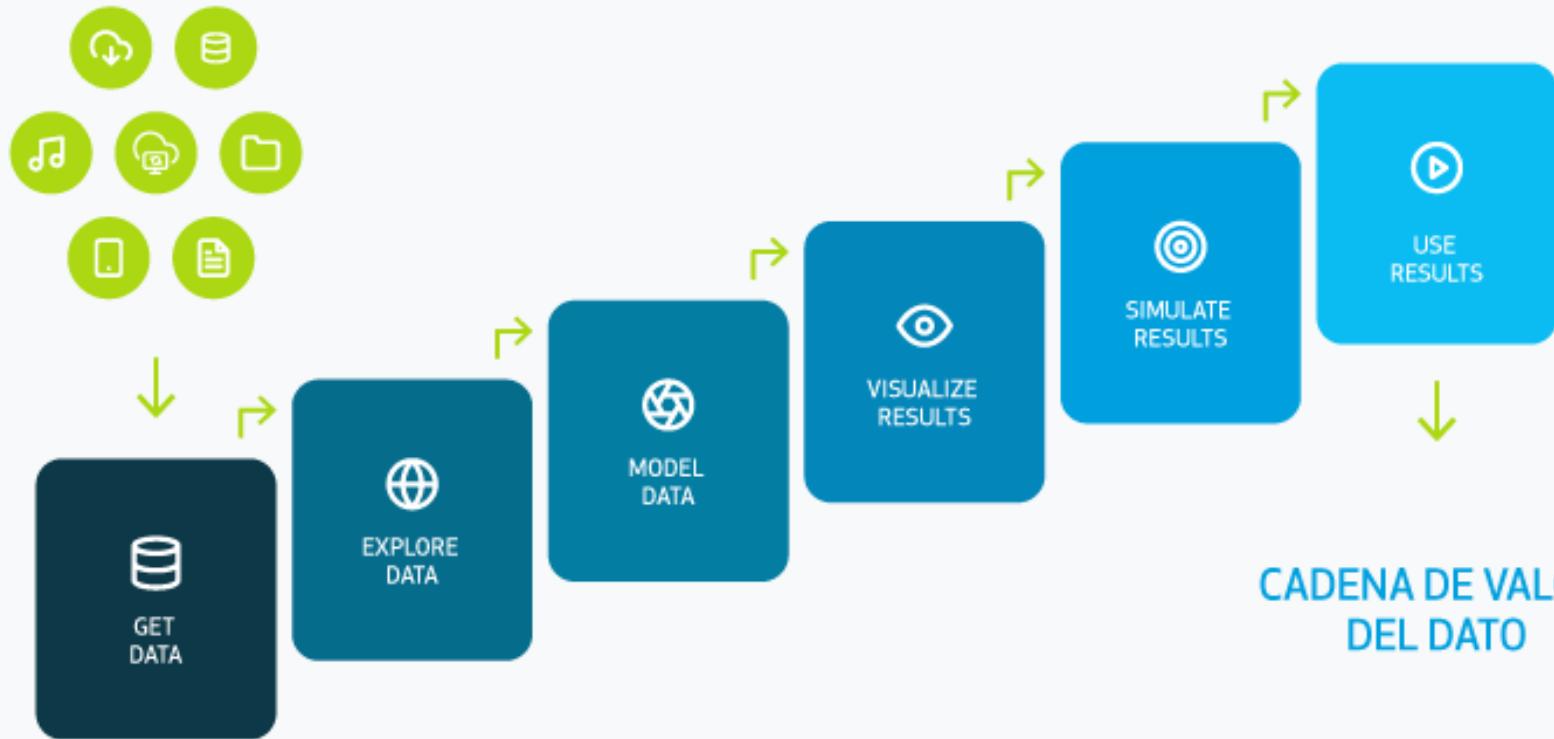


Where does big data come from?

Most big data efforts are currently focused on analyzing internal data to extract insights. Fewer organizations are looking at data outside their firewalls, such as social media.



IBM



Uber

Coca-Cola

NETFLIX





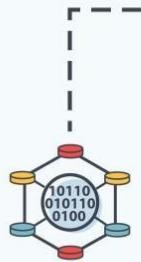


5 prácticas que te ayudarán a desarrollar una empresa Data Driven.

- **Cultivar una cultura centrada en los datos**
- **Elegir los datos correctos**
- **Adoptar un enfoque de mejora continua**
- **Industrialización de datos e Inteligencia Artificial**
- **Utilizar una CDP**



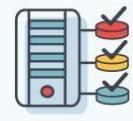
BIG DATA



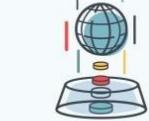
Volume



Value



Veracity



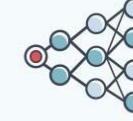
Visualization



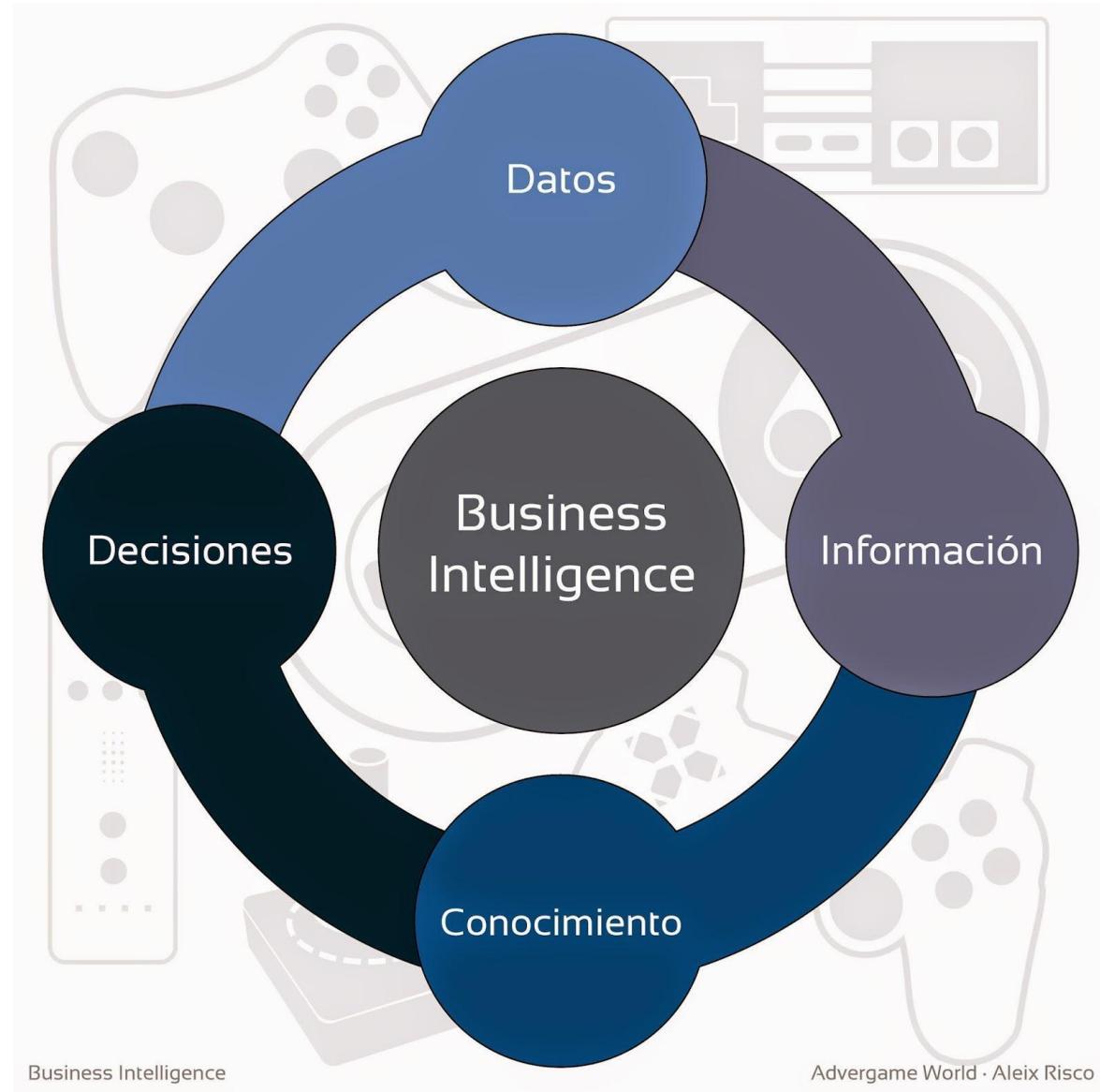
Variety



Velocity



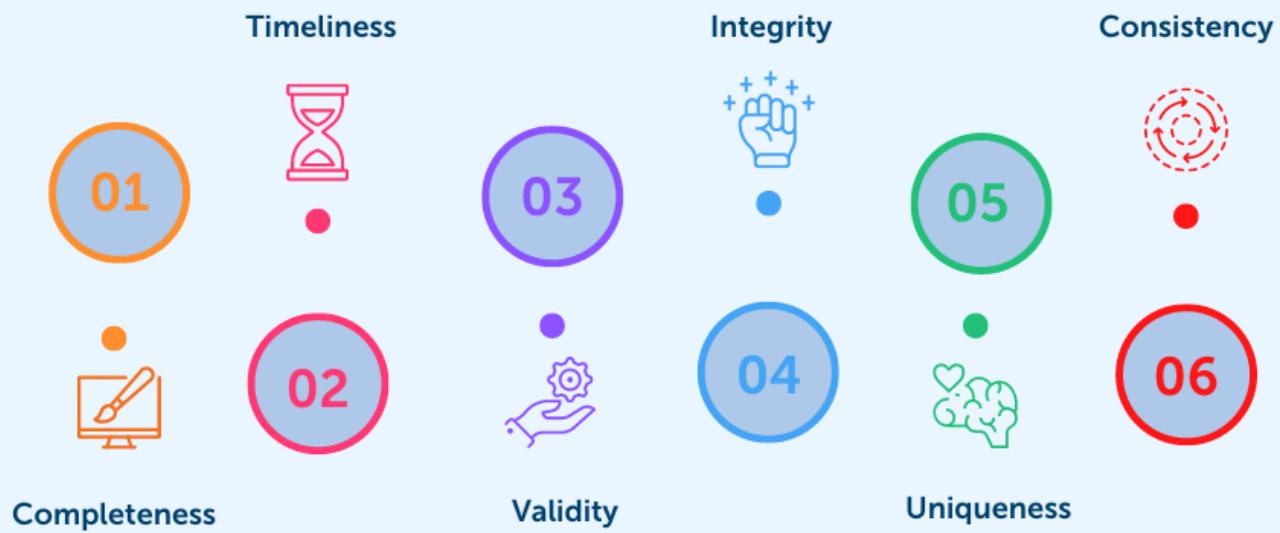
Virality



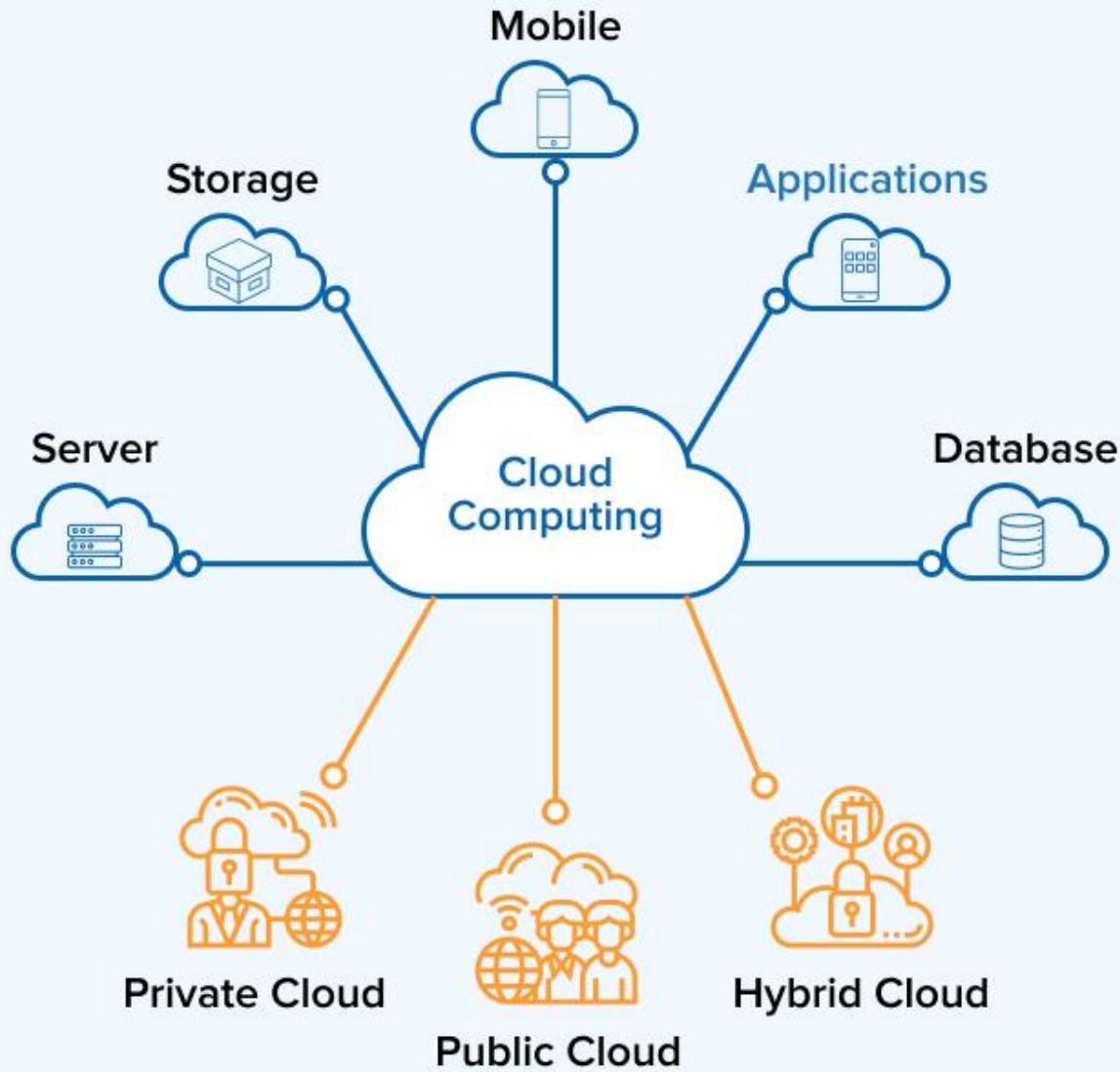
Tipos de contenidos y su evolución



6 Elements Of Data Quality



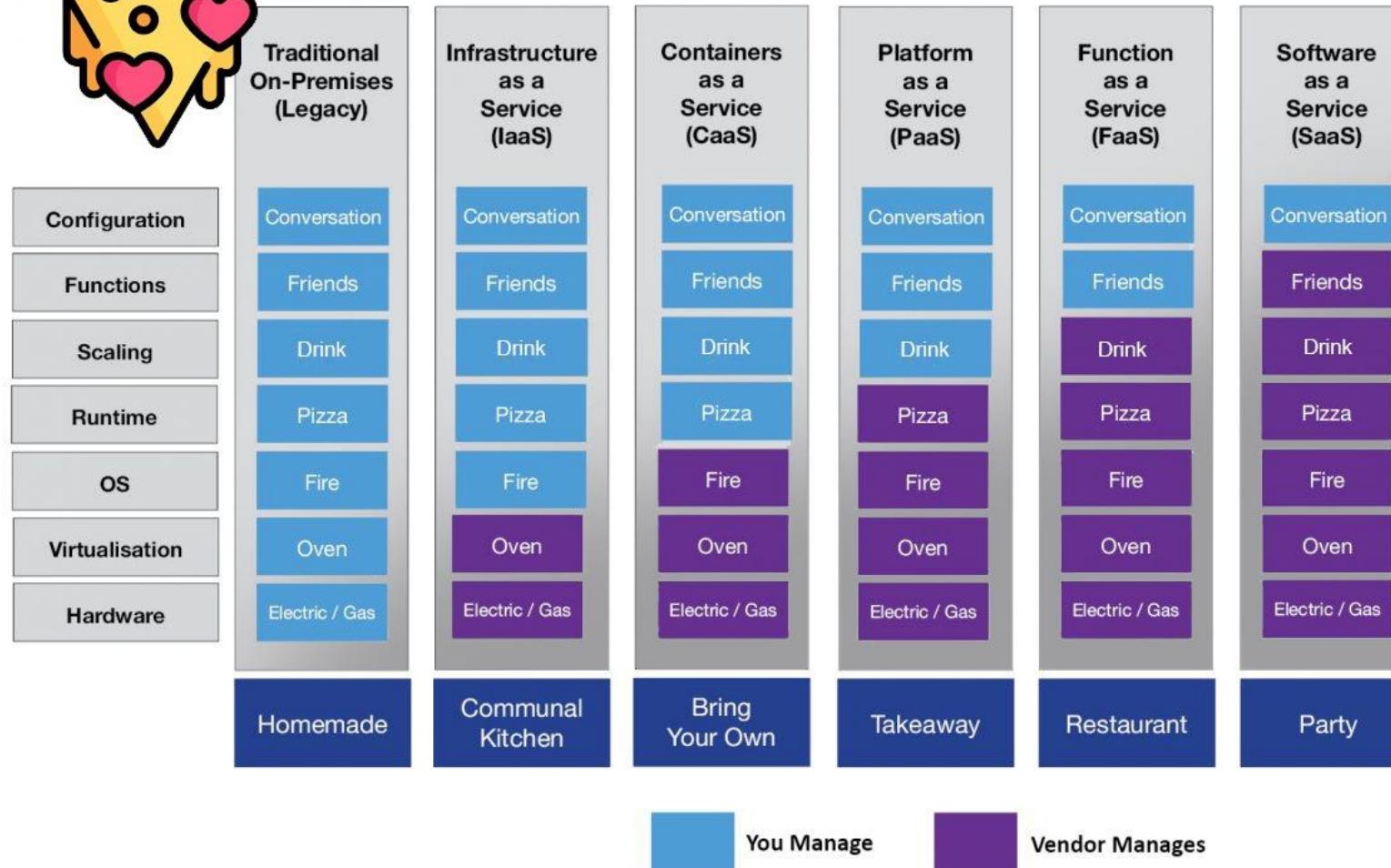






Pizza as a Service Example

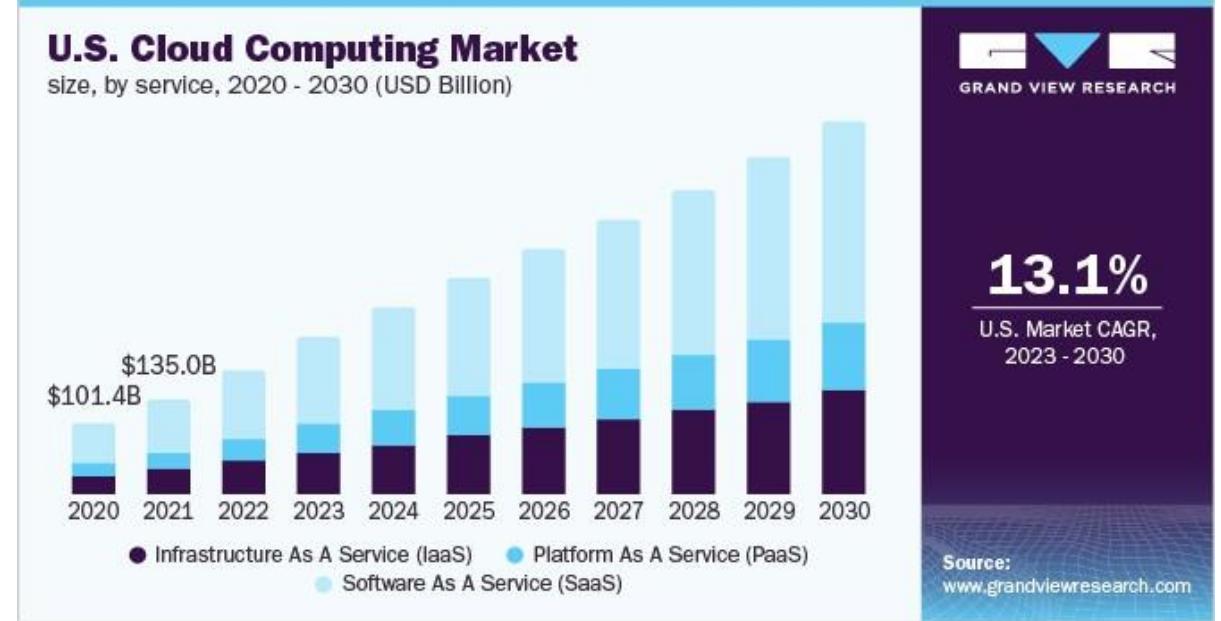
How to Choose the Level of Azure Service



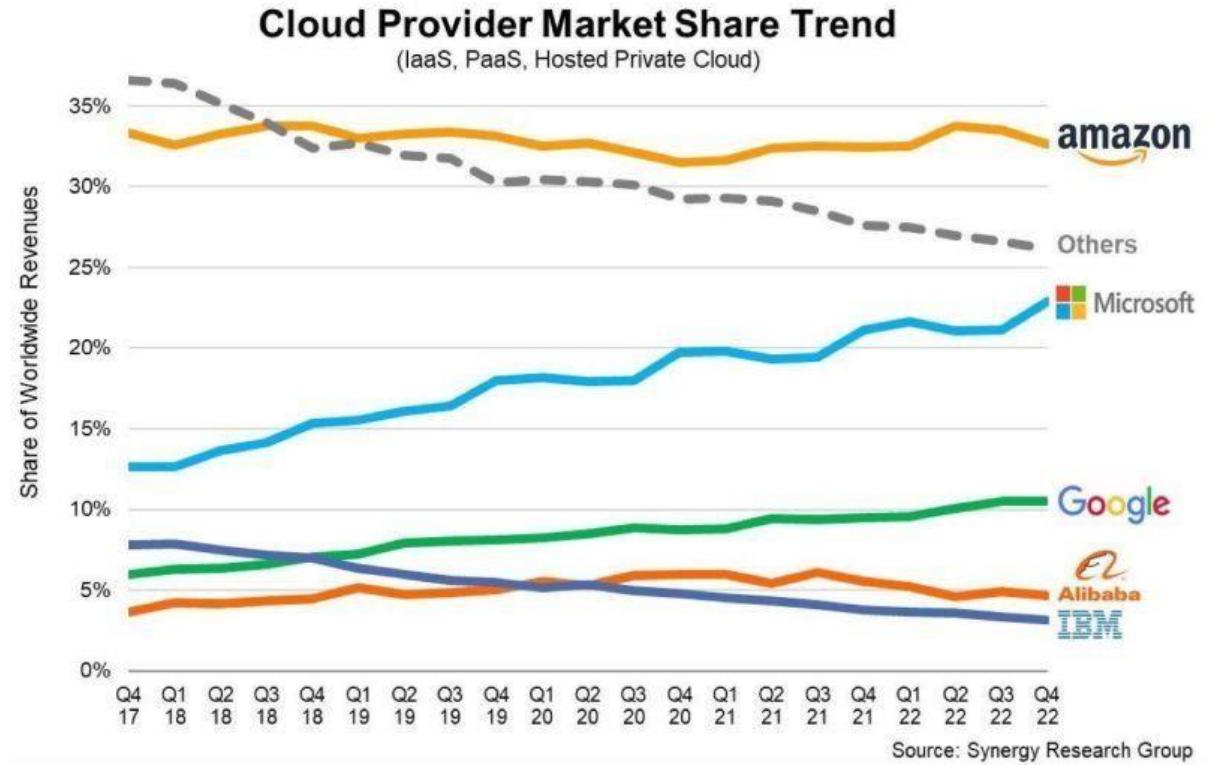
VENTAJAS DE CLOUD COMPUTING



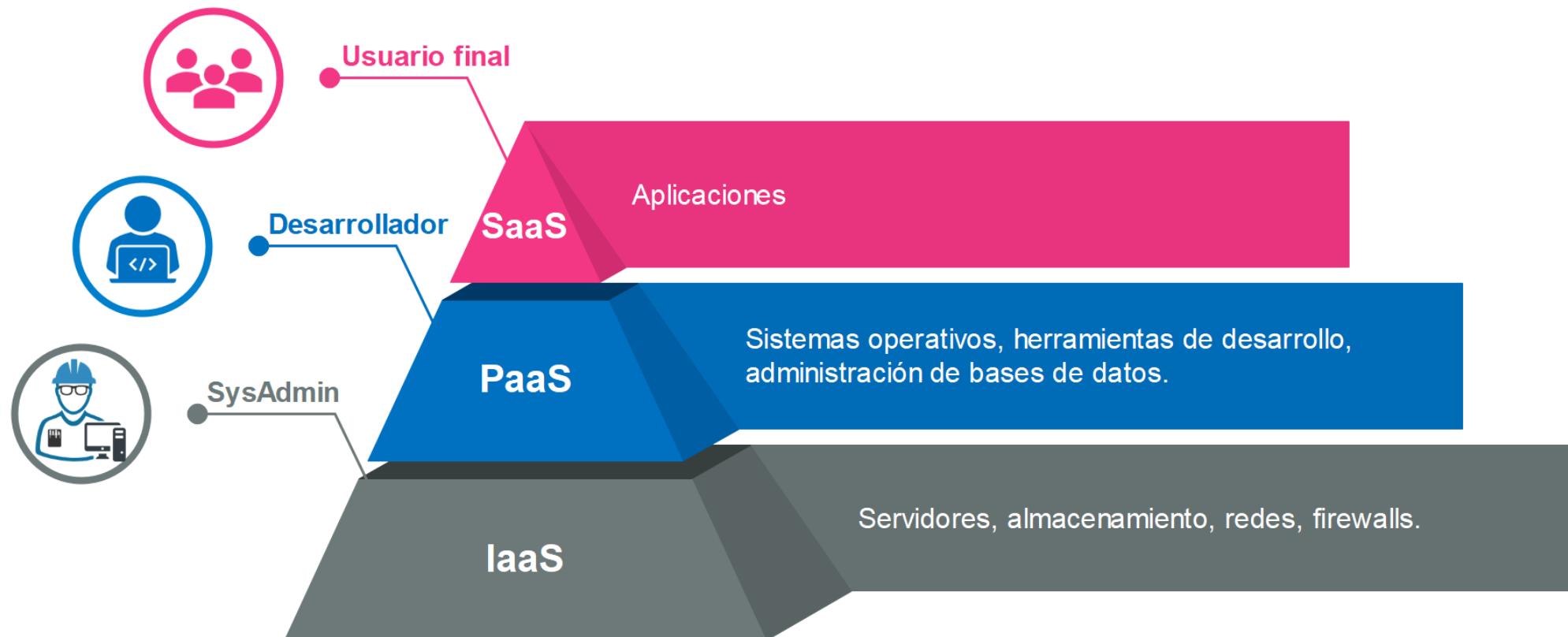
EVOLUCIÓN CLOUD COMPUTING

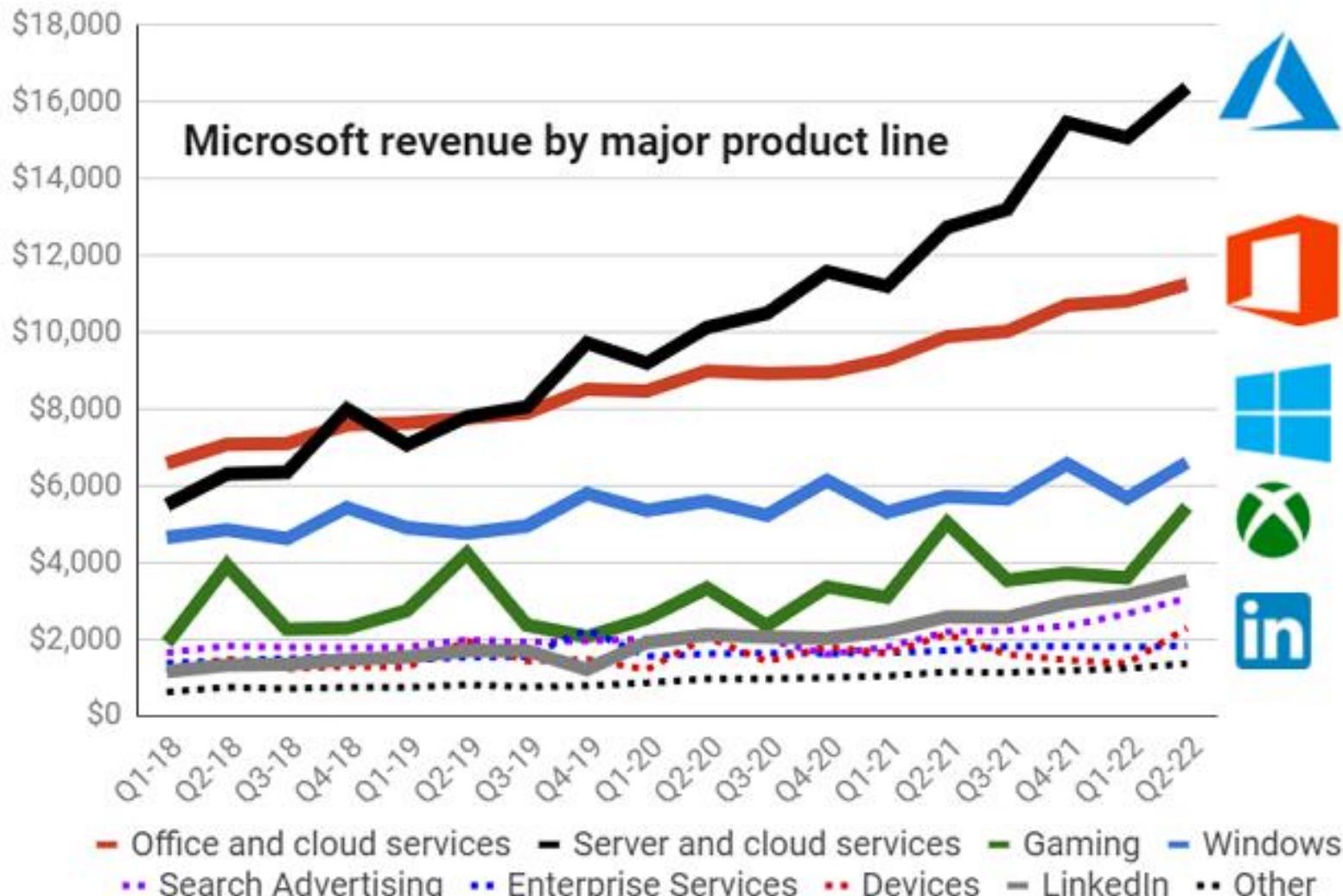


PRINCIPALES PROVEEDORES



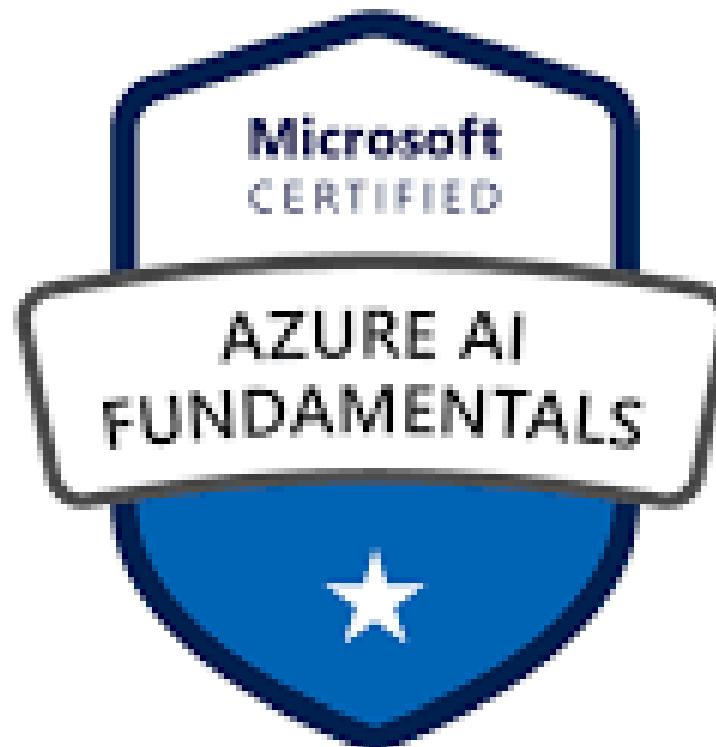
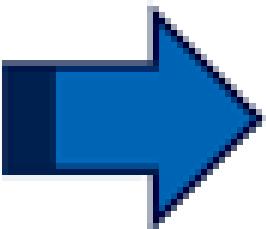
MODELOS DE SERVICIO



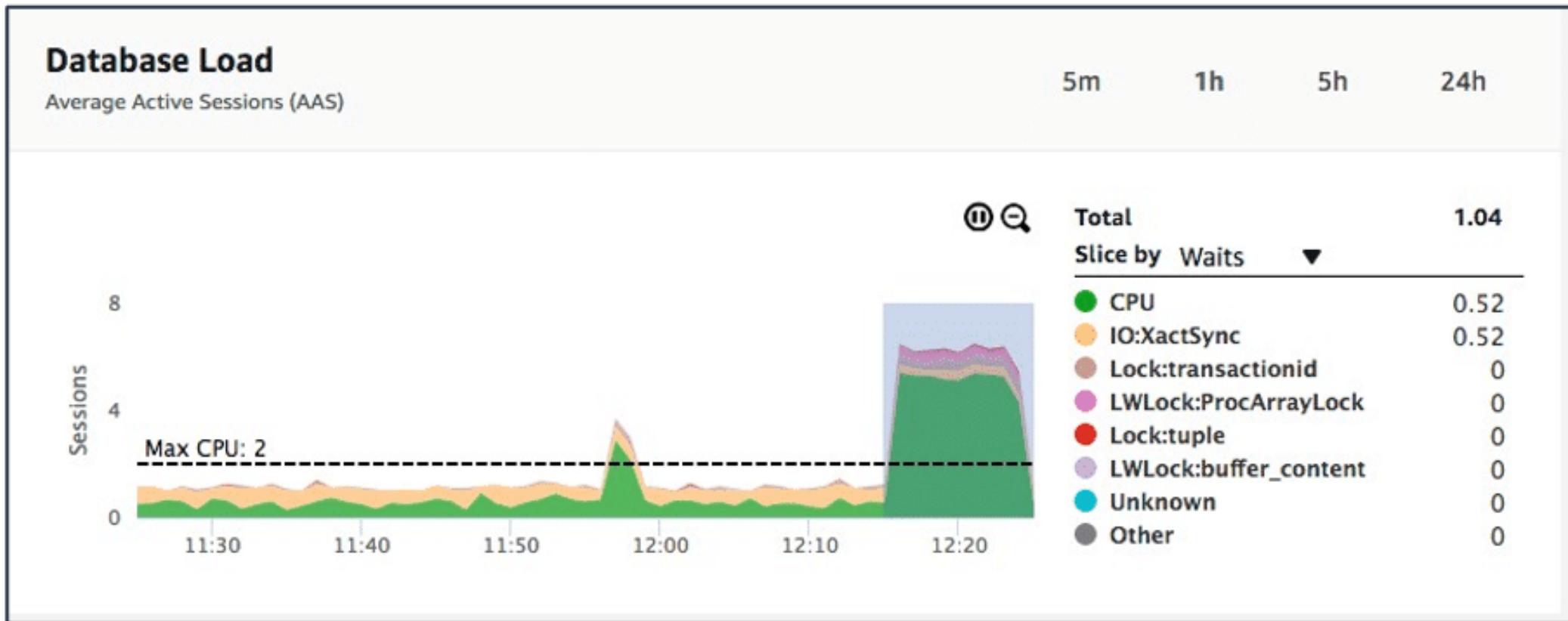


Source: Microsoft 10K and 10Q filings, in millions per fiscal quarter GeekWire

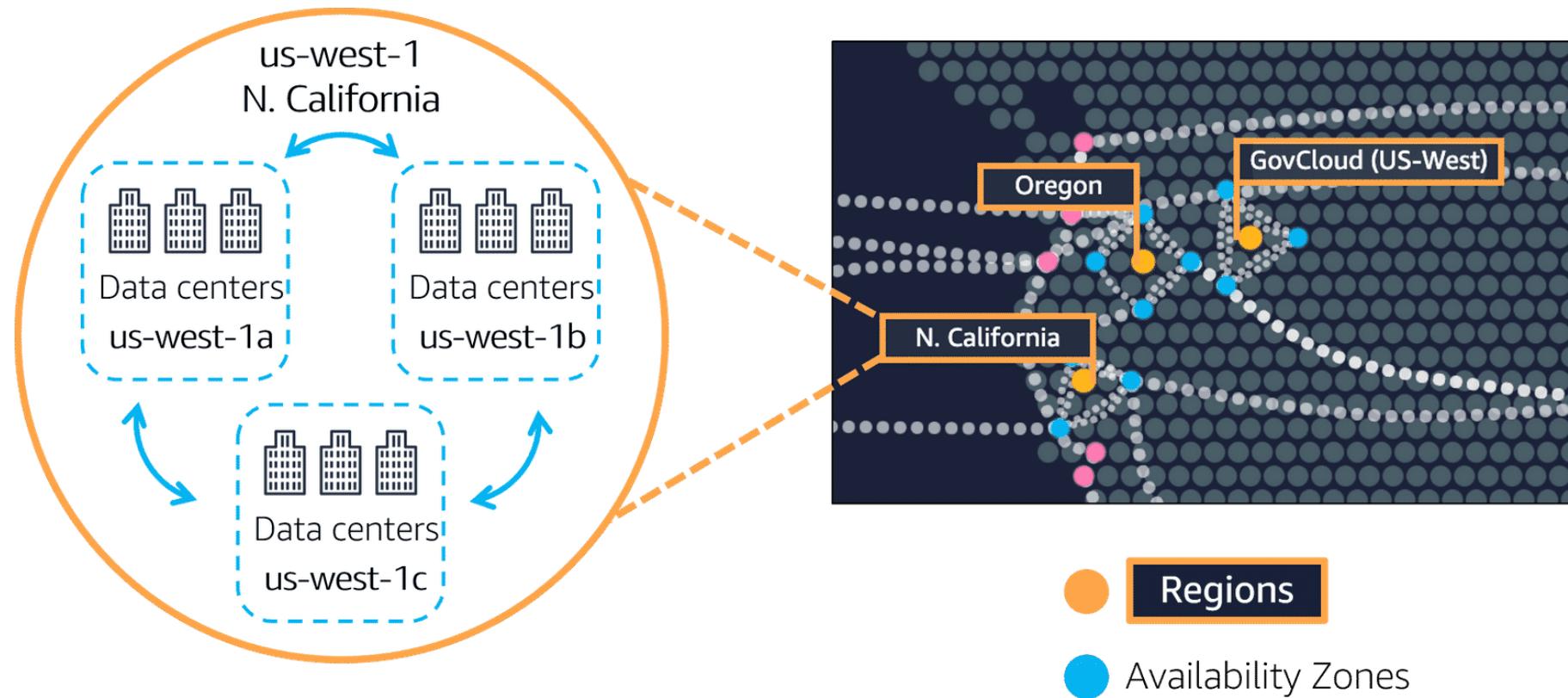
CERTIFICACIONES



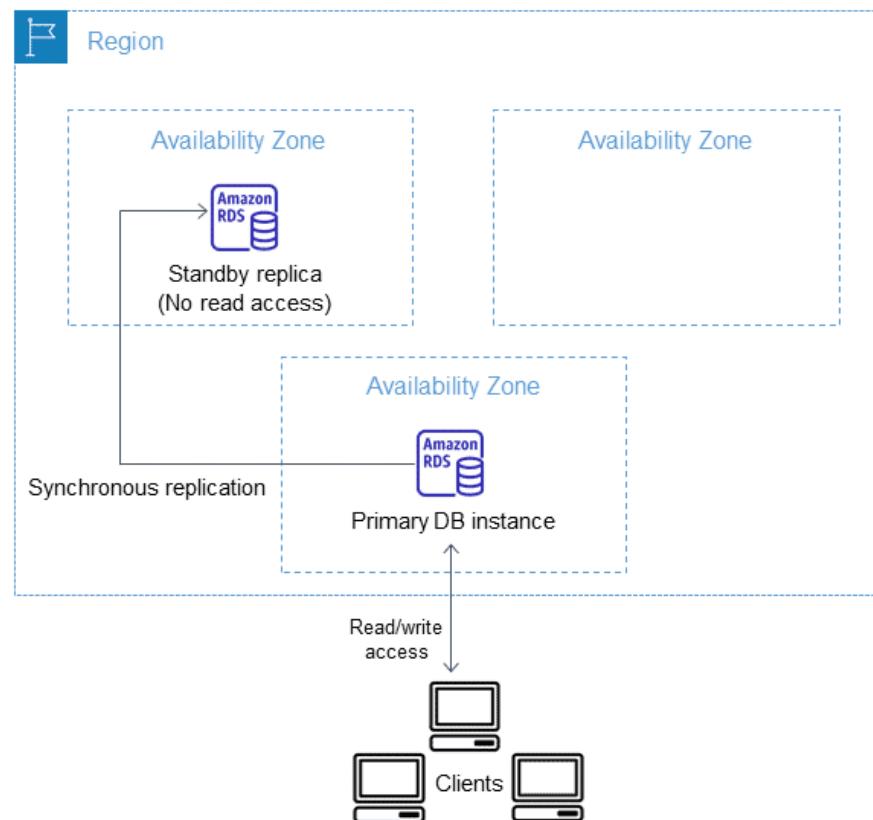
EXCELENCIA OPERATIVA



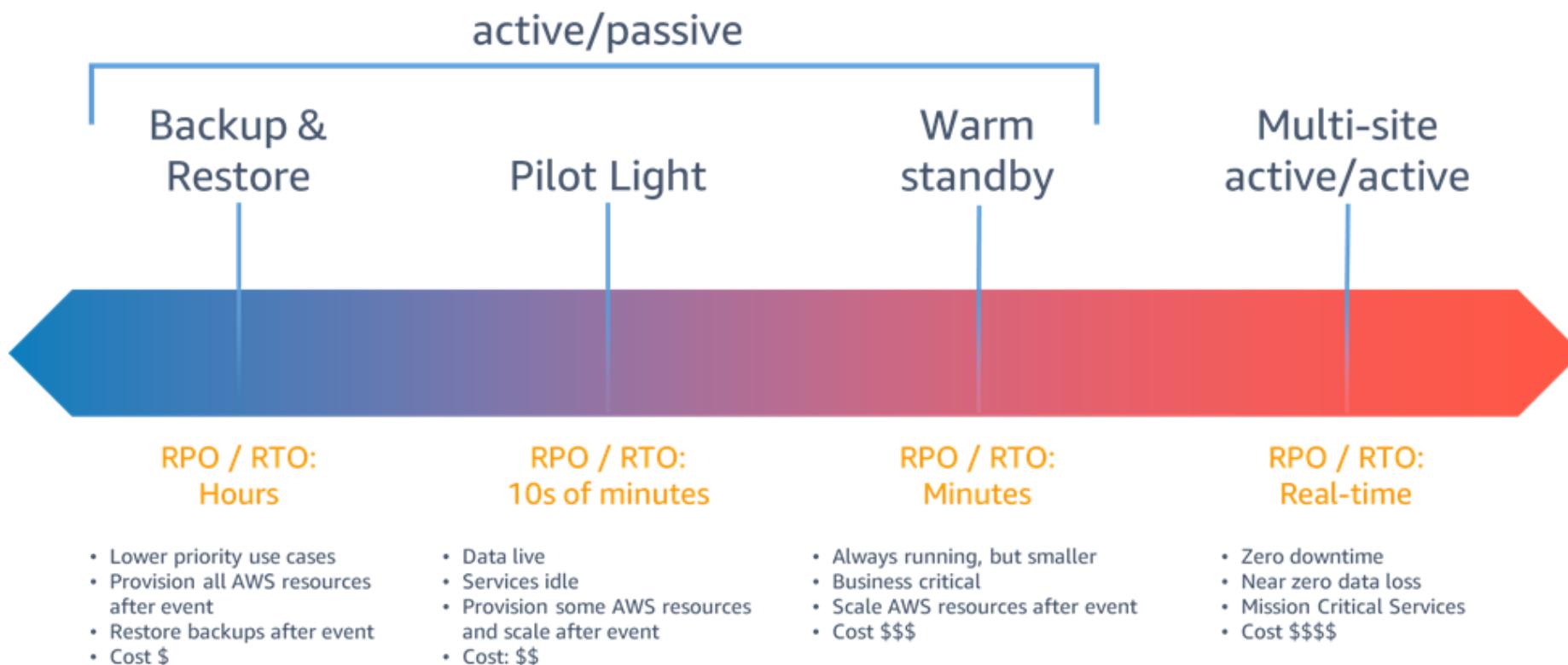
ALTA DISPONIBILIDAD



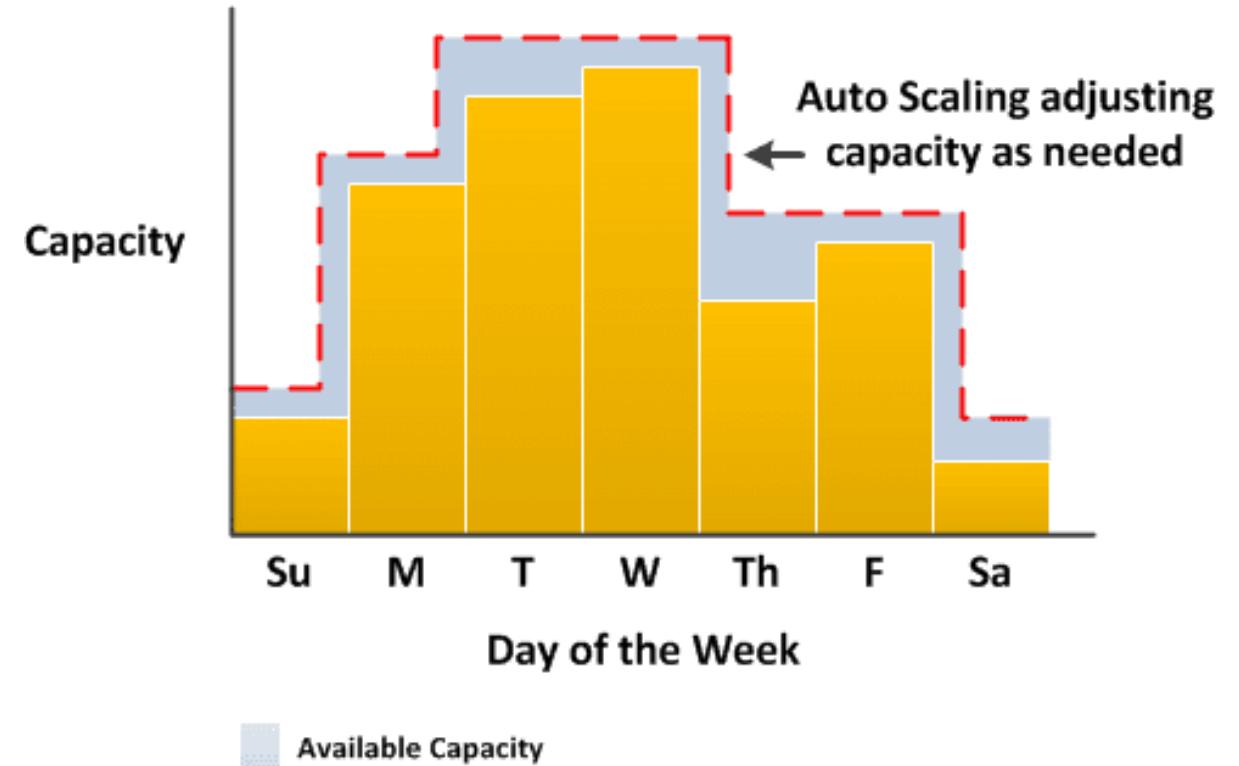
MULTI-AZ



RECUPERACIÓN ANTE DESASTRES



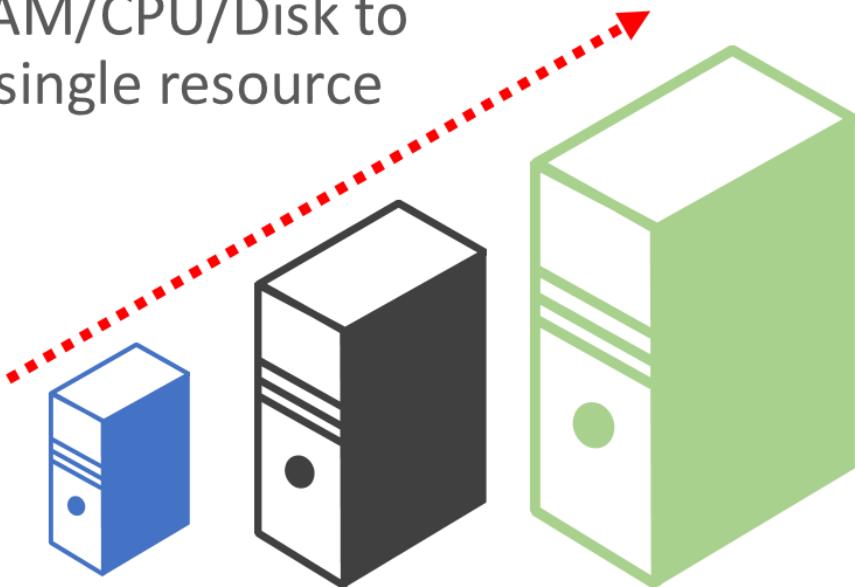
OPTIMIZACIÓN DE COSTES / AUTOESCALADO



ESCALADO HORIZONTAL Y VERTICAL

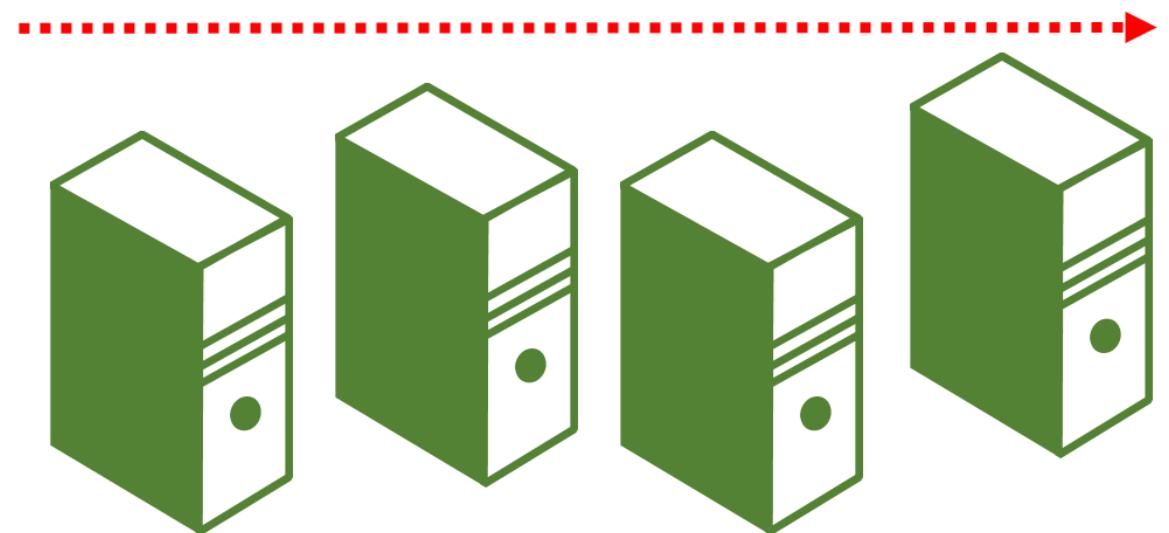
Scale Up (vertical scaling)

Increase capacity by adding RAM/CPU/Disk to a single resource



Scale Out (horizontal scaling)

Increase capacity by adding resources



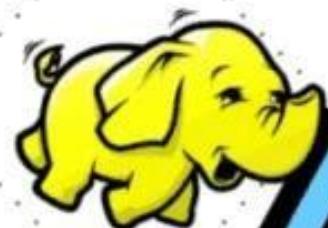
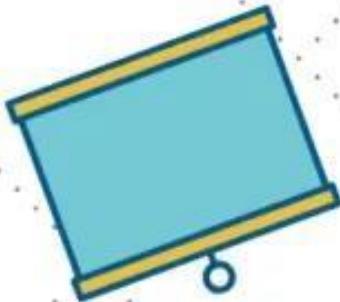


Microsoft

chat.openai.com

ChatGPT

APACHE HADOOP

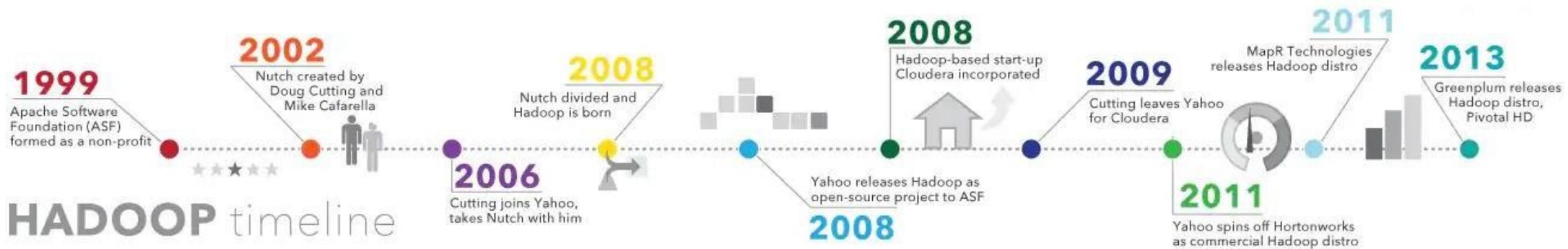


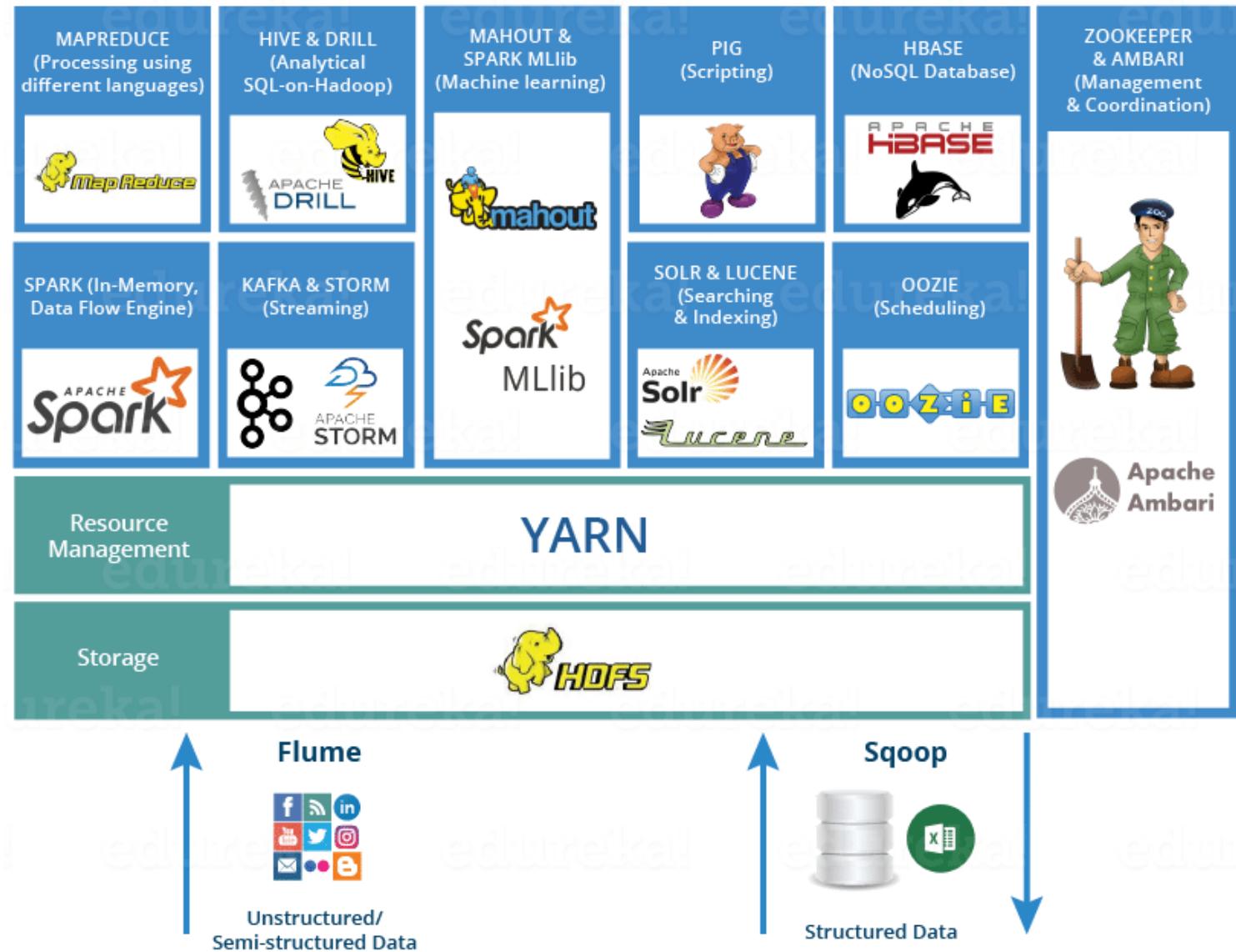
hadoop
HDFS
hadoop
MapReduce
hadoop
YARN

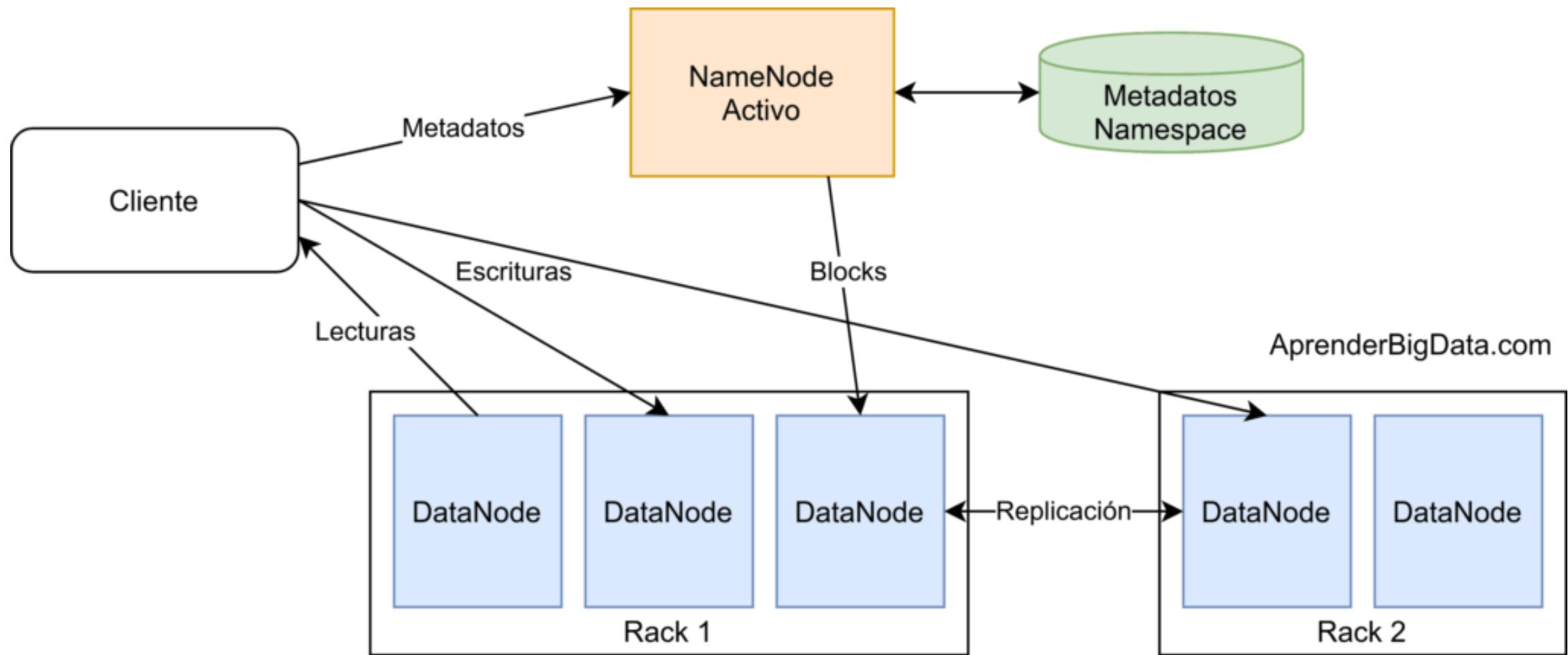
The word "hadoop" is written in a large, bold, blue sans-serif font, tilted slightly upwards and to the right. Above it, the words "HDFS" and "MapReduce" are written in smaller blue font, each accompanied by a small yellow elephant icon. To the right, the word "YARN" is written in blue font, also accompanied by a small yellow elephant icon.



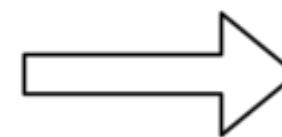
HISTORIA HADOOP







MapReduce



MapReduce 2, Spark,
HBase, etc

YARN
Resource Manager



HDFS



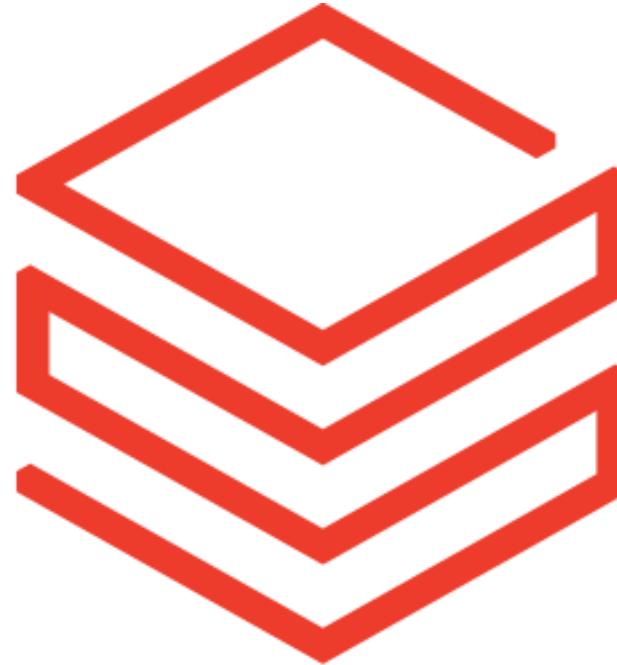
Hadoop 1

Hadoop 2

SPARK

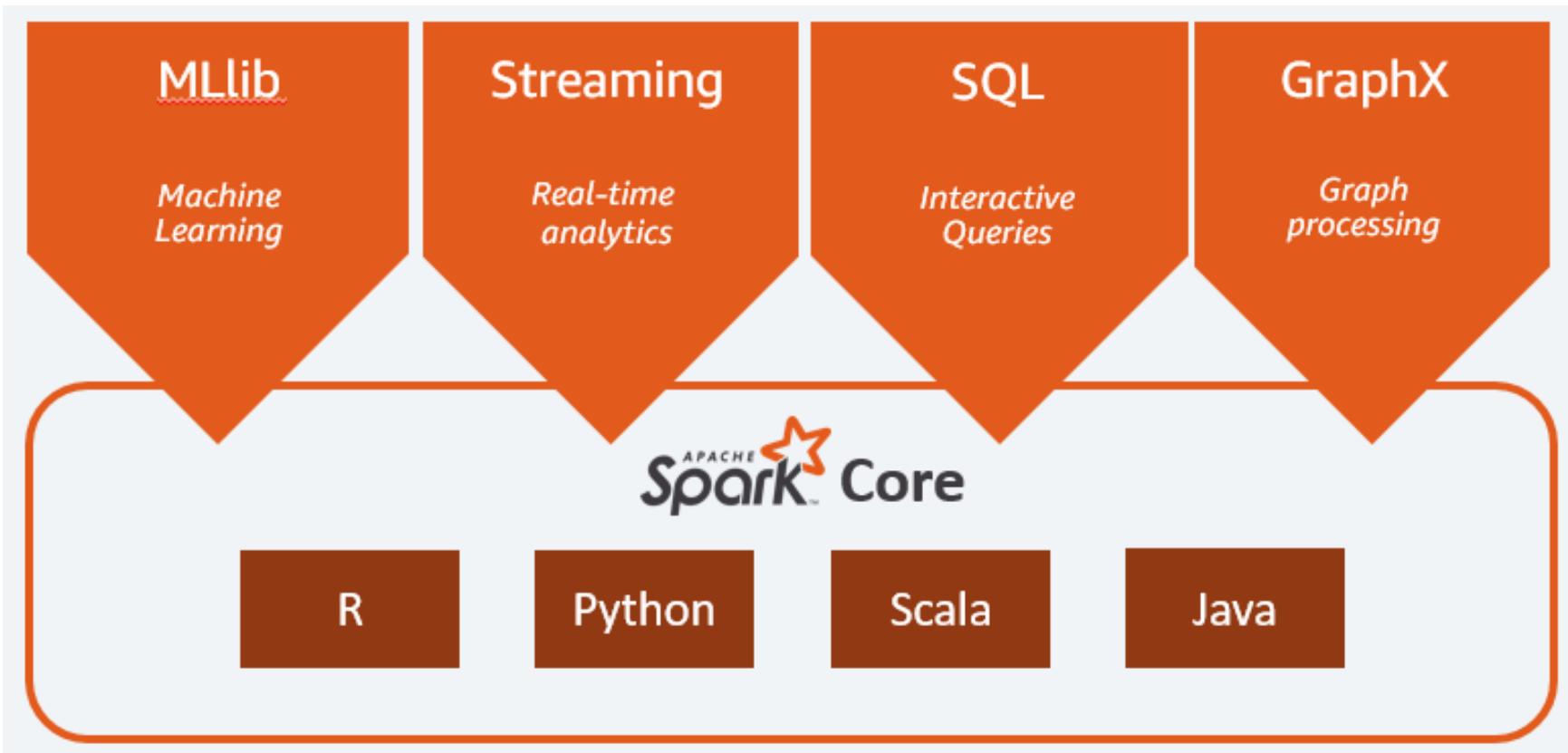
- “MapReduce va en camino de convertirse en un legado, tenemos Spark” dice el hombre detrás de Apache Hadoop, *Doug Cutting* .





databricks

ECOSISTEMA SPARK







**MICROSOFT
FABRIC**

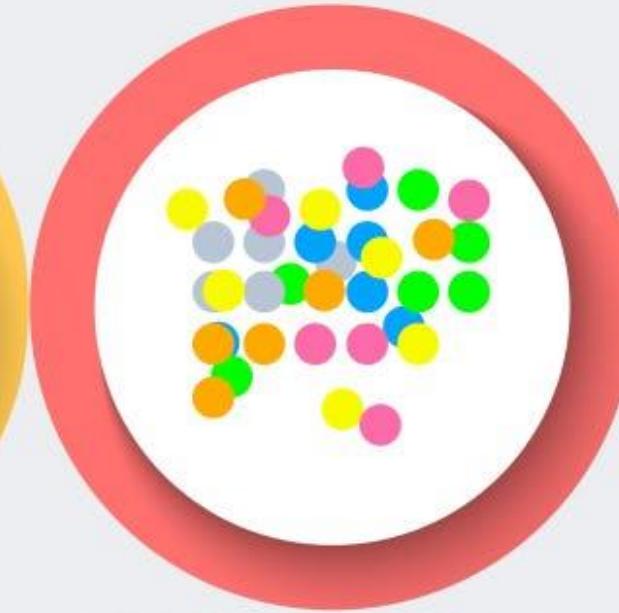
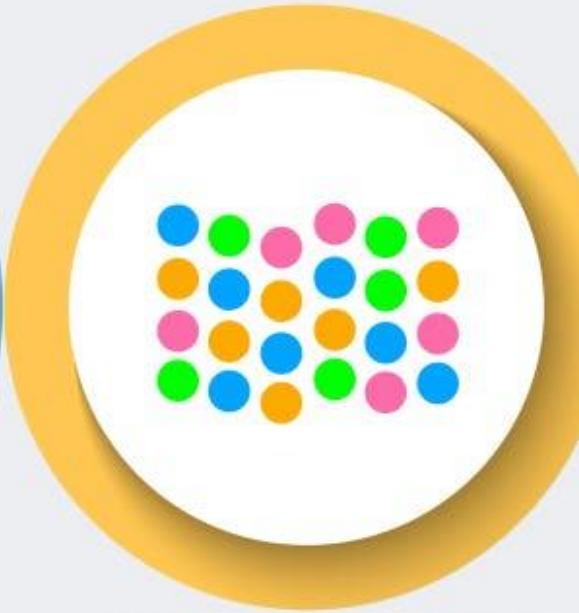
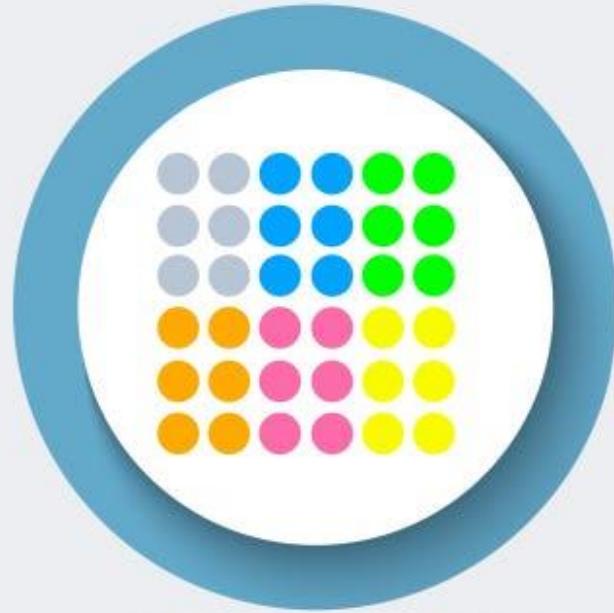
DATOS

.....

Estructurados

Semiestructurados

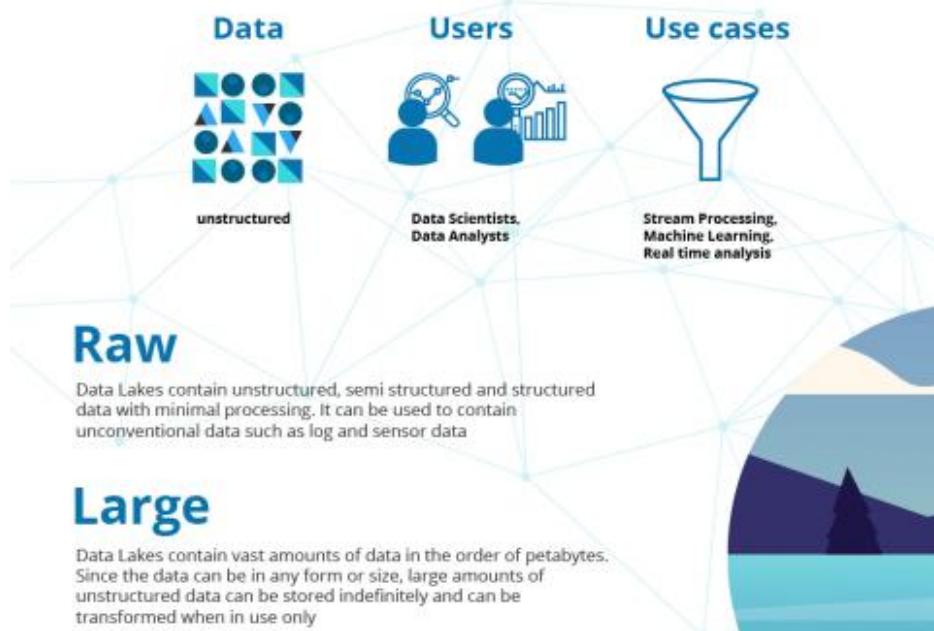
No
Estructurados



DATA LAKE

vs

DATA WAREHOUSE



Raw

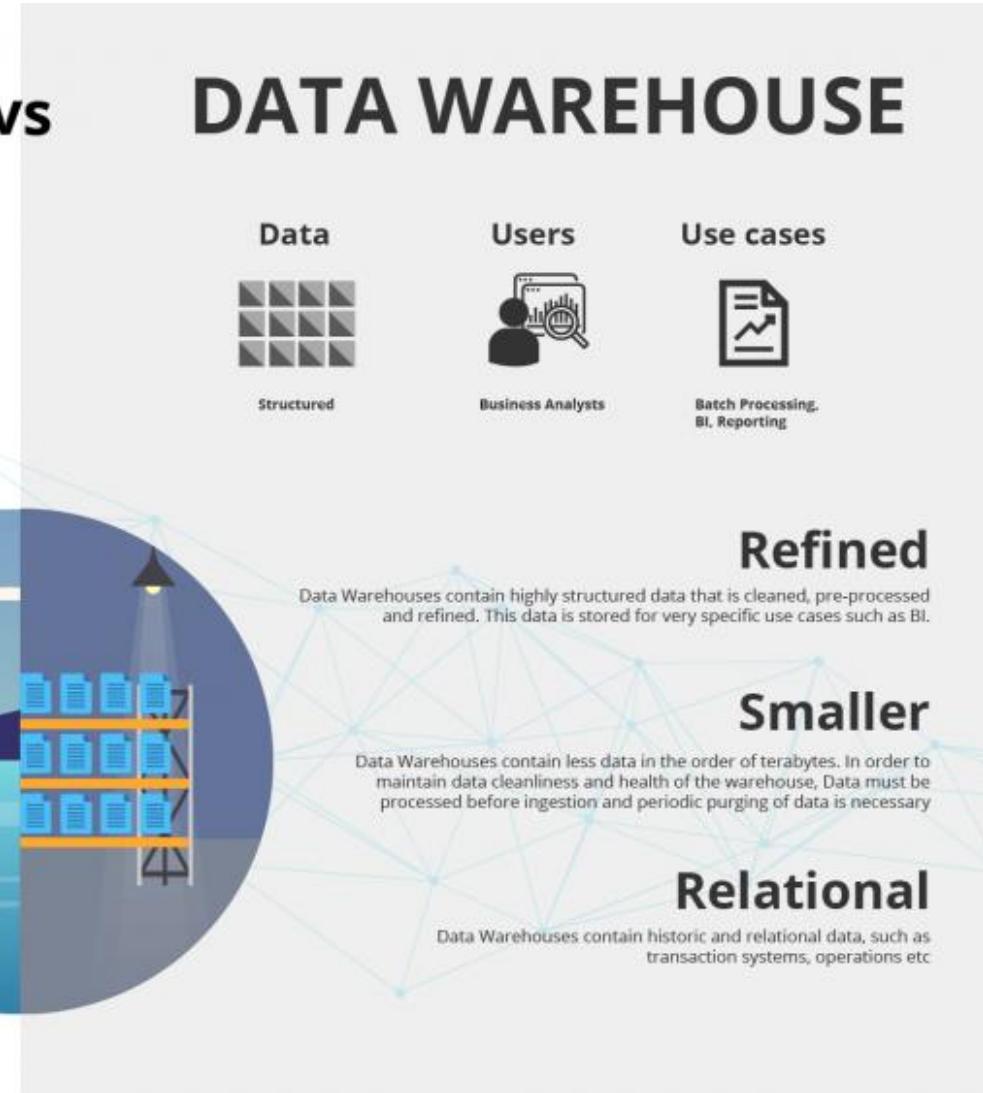
Data Lakes contain unstructured, semi structured and structured data with minimal processing. It can be used to contain unconventional data such as log and sensor data

Large

Data Lakes contain vast amounts of data in the order of petabytes. Since the data can be in any form or size, large amounts of unstructured data can be stored indefinitely and can be transformed when in use only

Undefined

Data in data lakes can be used for a wide variety of applications, such as Machine Learning, Streaming analytics, and AI



Refined

Data Warehouses contain highly structured data that is cleaned, pre-processed and refined. This data is stored for very specific use cases such as BI.

Smaller

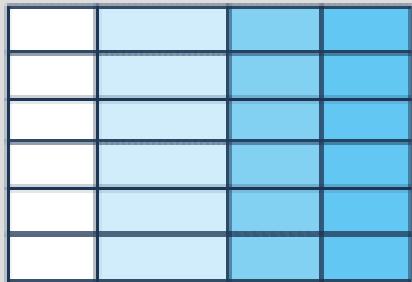
Data Warehouses contain less data in the order of terabytes. In order to maintain data cleanliness and health of the warehouse, Data must be processed before ingestion and periodic purging of data is necessary

Relational

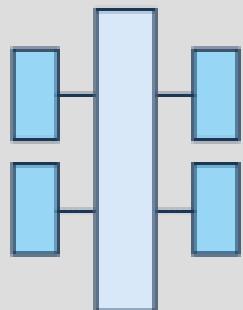
Data Warehouses contain historic and relational data, such as transaction systems, operations etc

SQL

Relational



Analytical (OLAP)

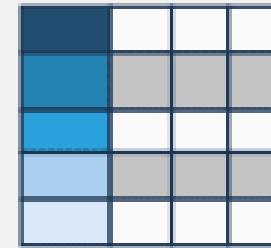


NoSQL

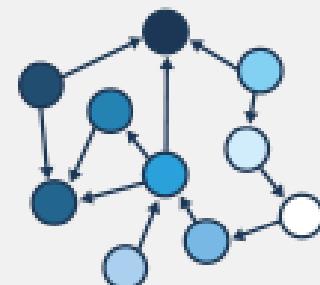
Key-Value



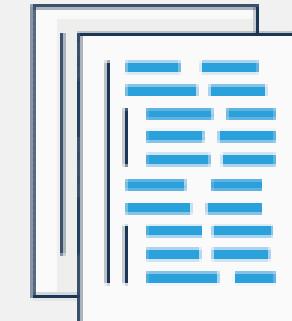
Column-Family



Graph



Document





The screenshot shows the Apache Atlas web interface. At the top, there is a navigation bar with the organization name "MyOrg" and a dropdown menu. Below the navigation bar, there are links for "Access Manager", "Support", and "Billing". On the right side of the top bar, there is a "All Clusters" button with a dropdown arrow. In the center of the header, there is a search bar with a magnifying glass icon and a dropdown arrow.

The main content area has a breadcrumb navigation path: "myProDev > Charts > Clusters". There are three tabs at the top of this section: "Clusters" (which is selected), "Triggers", and "Data Lake". To the right of the tabs is a green "Create a New Cluster" button.

The main content area is titled "Clusters" and contains a search bar with the placeholder "Find a cluster...". Below the search bar, there is a card for the "MainDBCluster". The card includes the following details:

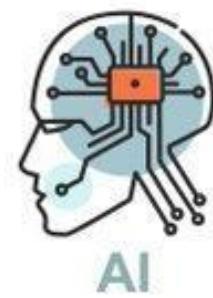
- SANDBOX**
- MainDBCluster** (Status: Green)
- Version 4.2.11
- CONNECT**, **METRICS**, **COLLECTIONS**, **...** buttons
- CLUSTER TIER**: M0 Sandbox (General)
- REGION**: AWS / N. Virginia (us-east-1)
- TYPE**: Replica Set - 3 nodes
- LINKED REALM APP**: None Linked

To the right of the cluster card, there are two metrics cards:

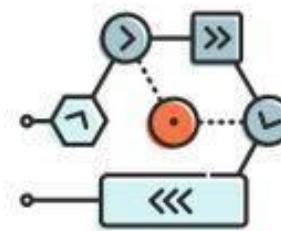
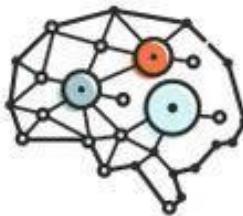
- Operations R: 0 W: 0** (100.0/s) - Last 6 Hours
- Logical Size 0.0 B** (512.0 MB max) - Last 6 Hours

A context menu is open over the operations metric card, listing options: "Edit Configuration", "Command Line Tools", "Load Sample Dataset", and "Terminate". A hand cursor is hovering over the "Terminate" option.

On the far right, there is a callout box with the heading "Enhance Your Experience" and the text: "For dedicated throughput, richer metrics and enterprise security options, upgrade your cluster now!". Below this is a green "Upgrade" button.



DEEP LEARNING



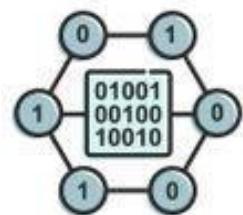
ALGORITHM



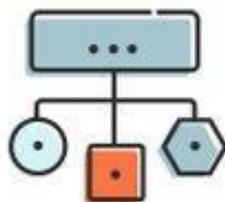
LEARNING



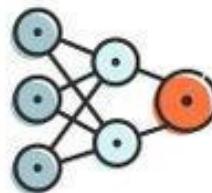
IMPROVES



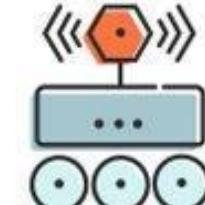
DATA MINING



CLASSIFICATION



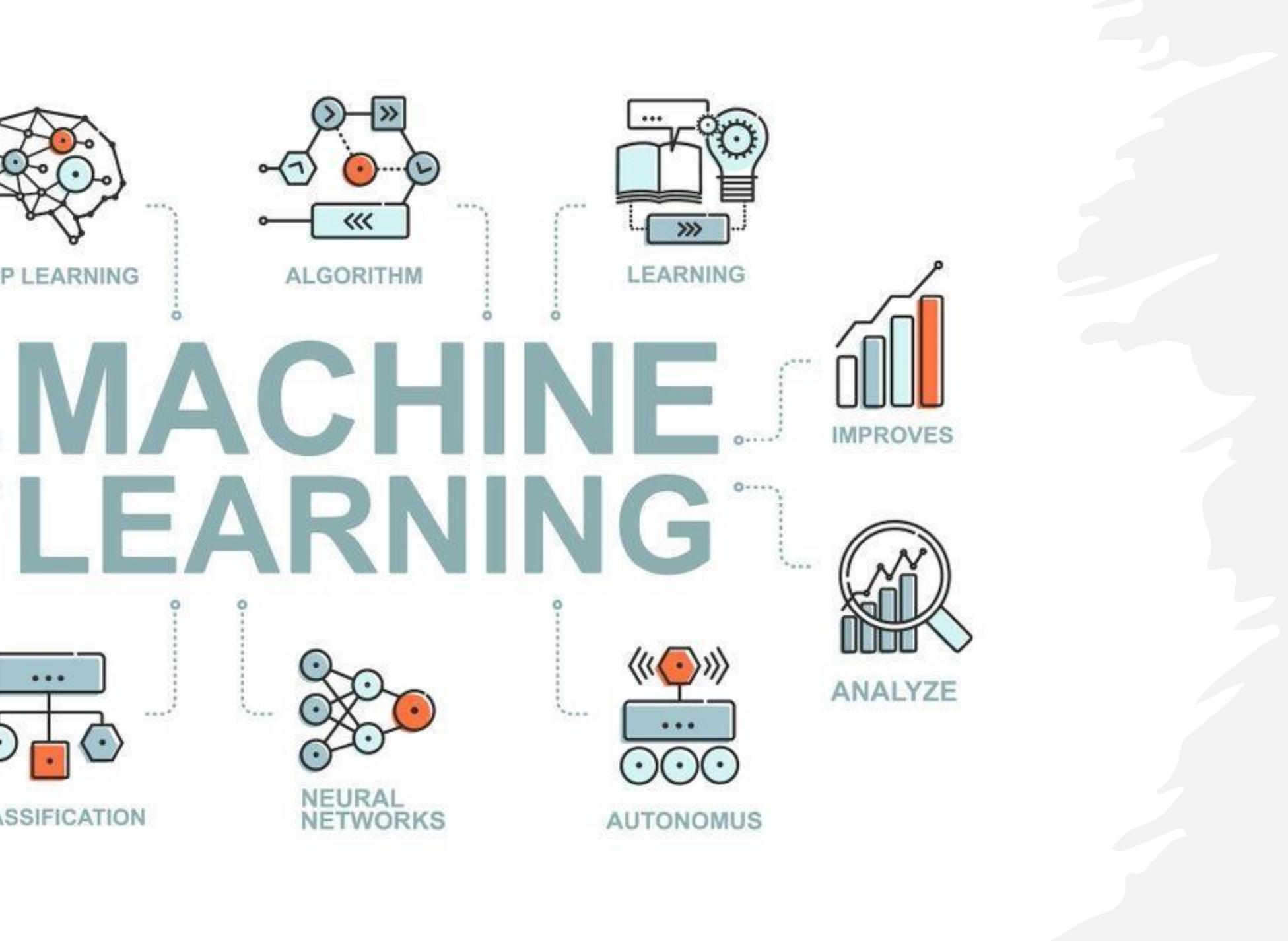
NEURAL NETWORKS

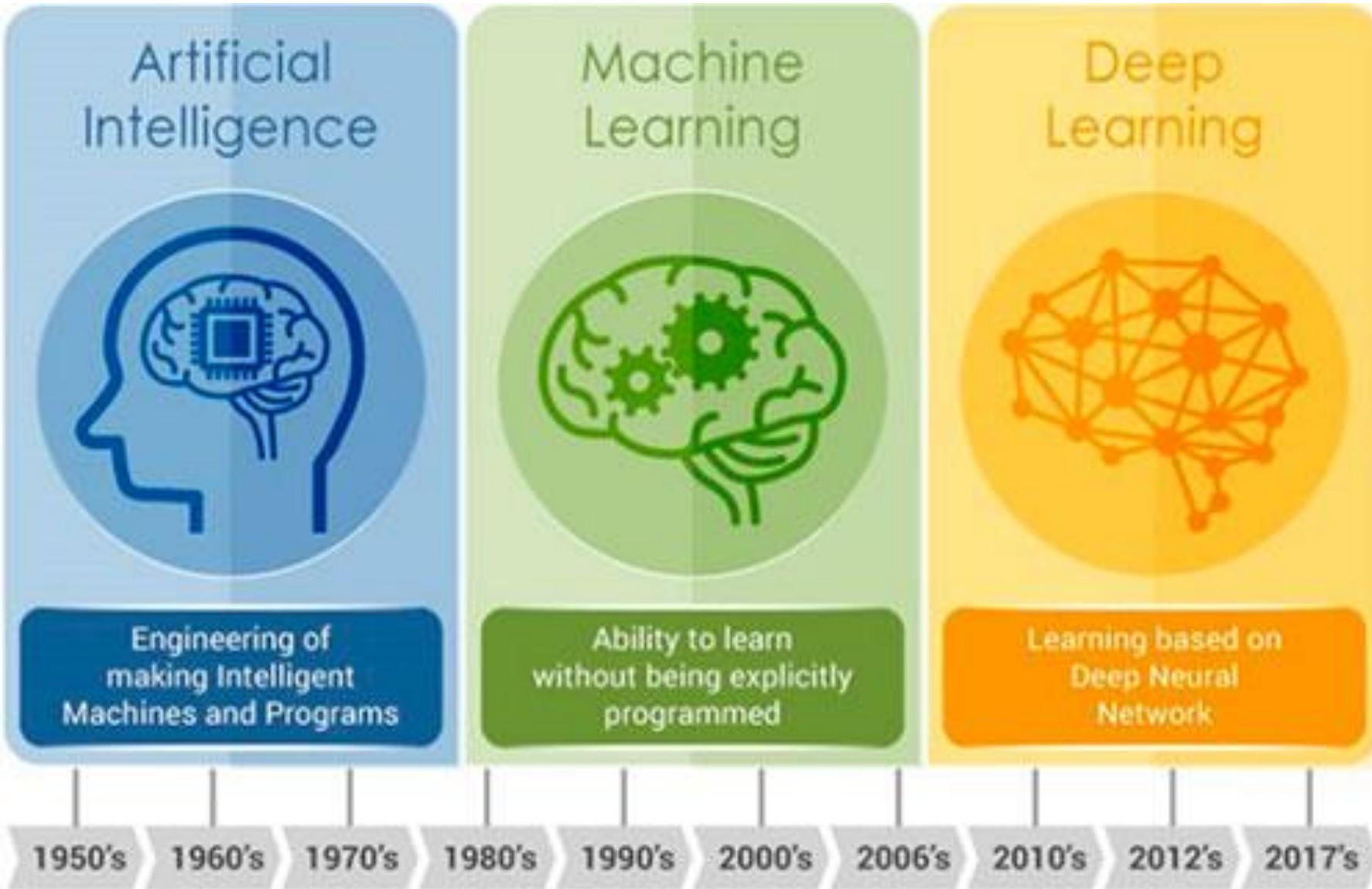


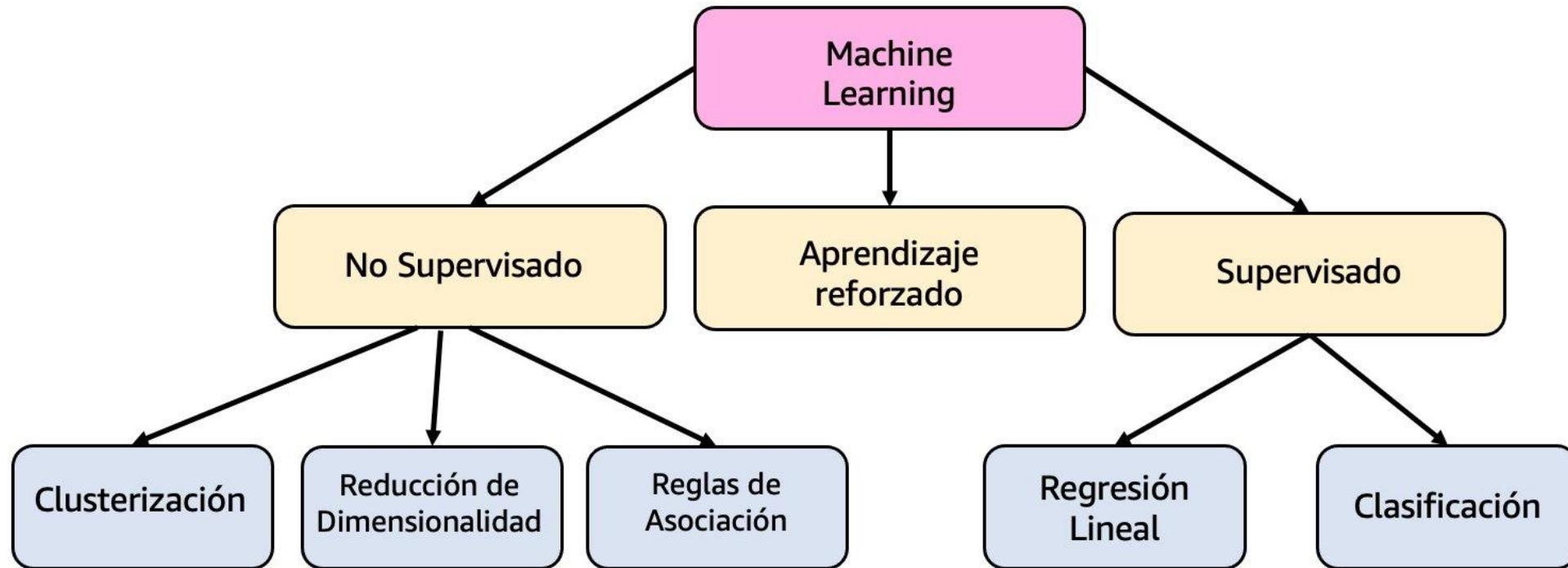
AUTONOMUS



ANALYZE







3 stages of AI



Narrow AI

Dedicated to assist
with or take over
specific tasks



General AI

Takes knowledge from
one domain, transfers
to other domain



Super AI

Machines that are an
order of magnitude
smarter than humans

Credit: Chris Noessel



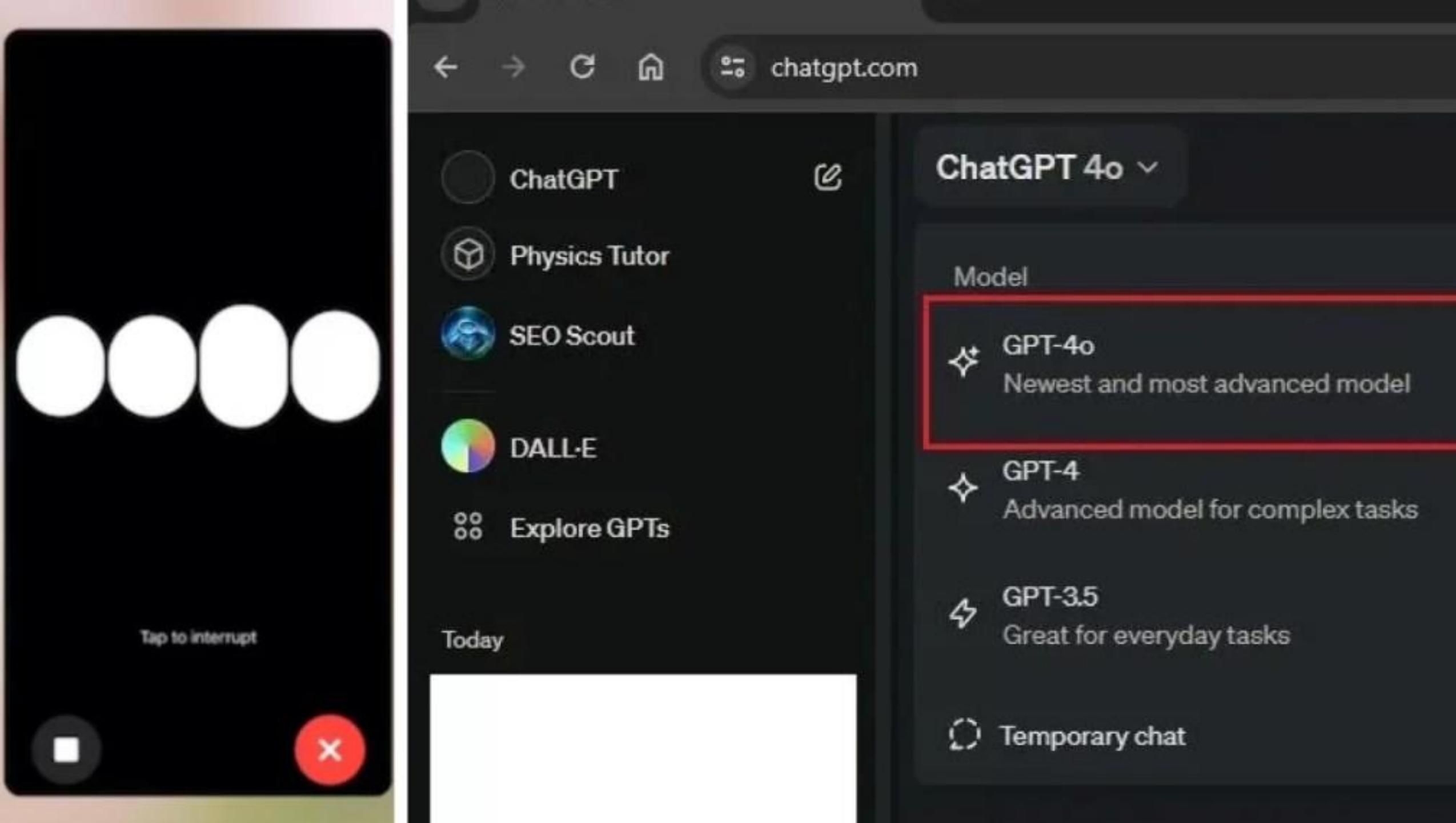


What the quack! I was just



Gemini



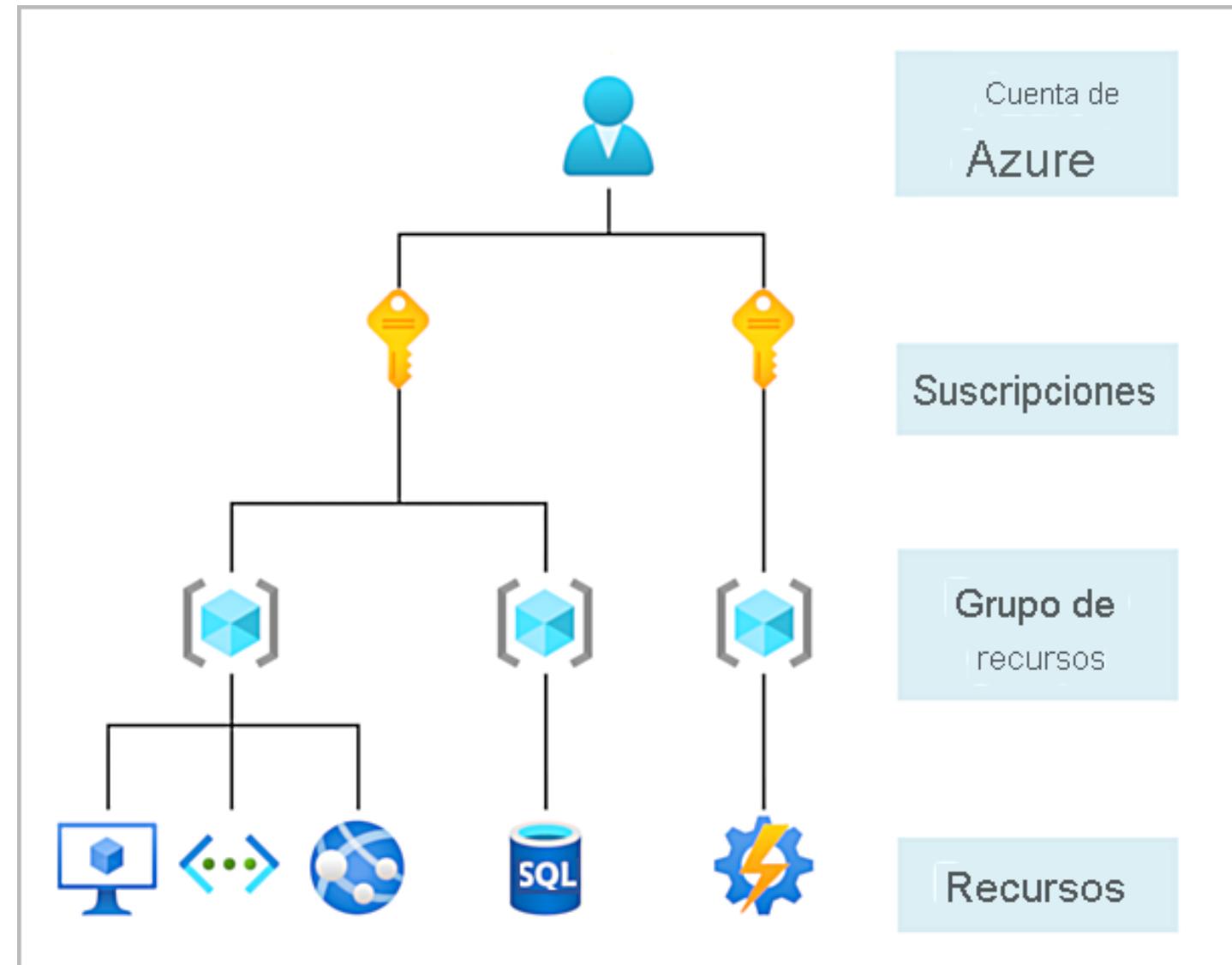


LLM

LARGE LANGUAGE MODEL



CUENTAS DE AZURE



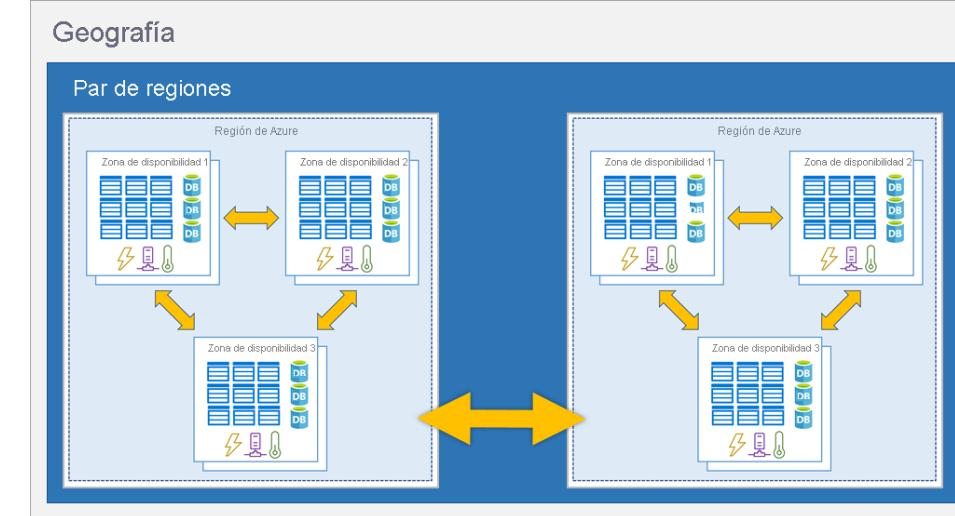
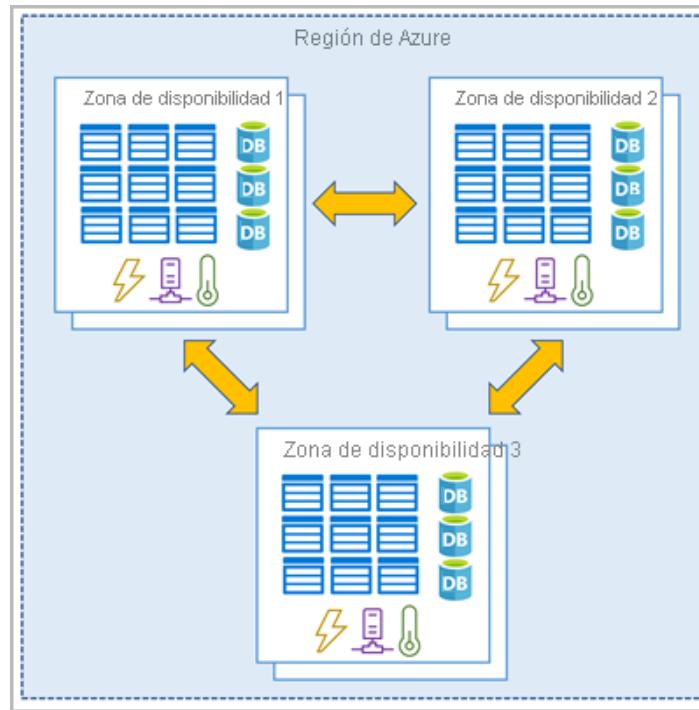
INFRAESTRUCTURA DE ADMINISTRACIÓN



Grupo de recursos



INFRAESTRUCTURA FÍSICA



AZURE PORTAL

The screenshot shows the Microsoft Azure portal interface. At the top, there is a navigation bar with a back arrow, forward arrow, refresh button, and a search bar containing the URL "portal.azure.com/". On the right side of the bar are icons for notifications, settings, and a user profile labeled "bailey@contoso.com CONTOSO". Below the navigation bar is a blue header bar with the text "Microsoft Azure" and a search bar that says "Search resources, services, and docs (G+/)".

The main content area is titled "Azure services" and features a "Create a resource" button, which is highlighted with a red box. Other service icons include App registrations, Azure Data Explorer..., Azure Active Directory, Subscriptions, Time Series Insights..., Resource groups, Function App, and More services.

Below this section is a "Navigate" row with four items: Subscriptions, Resource groups, All resources, and Dashboard.

The bottom section is titled "Tools" and includes links to Microsoft Learn, Azure Monitor, Security Center, and Cost Management.

AzureCLI



PowerShell



Bash



Storage
accounts



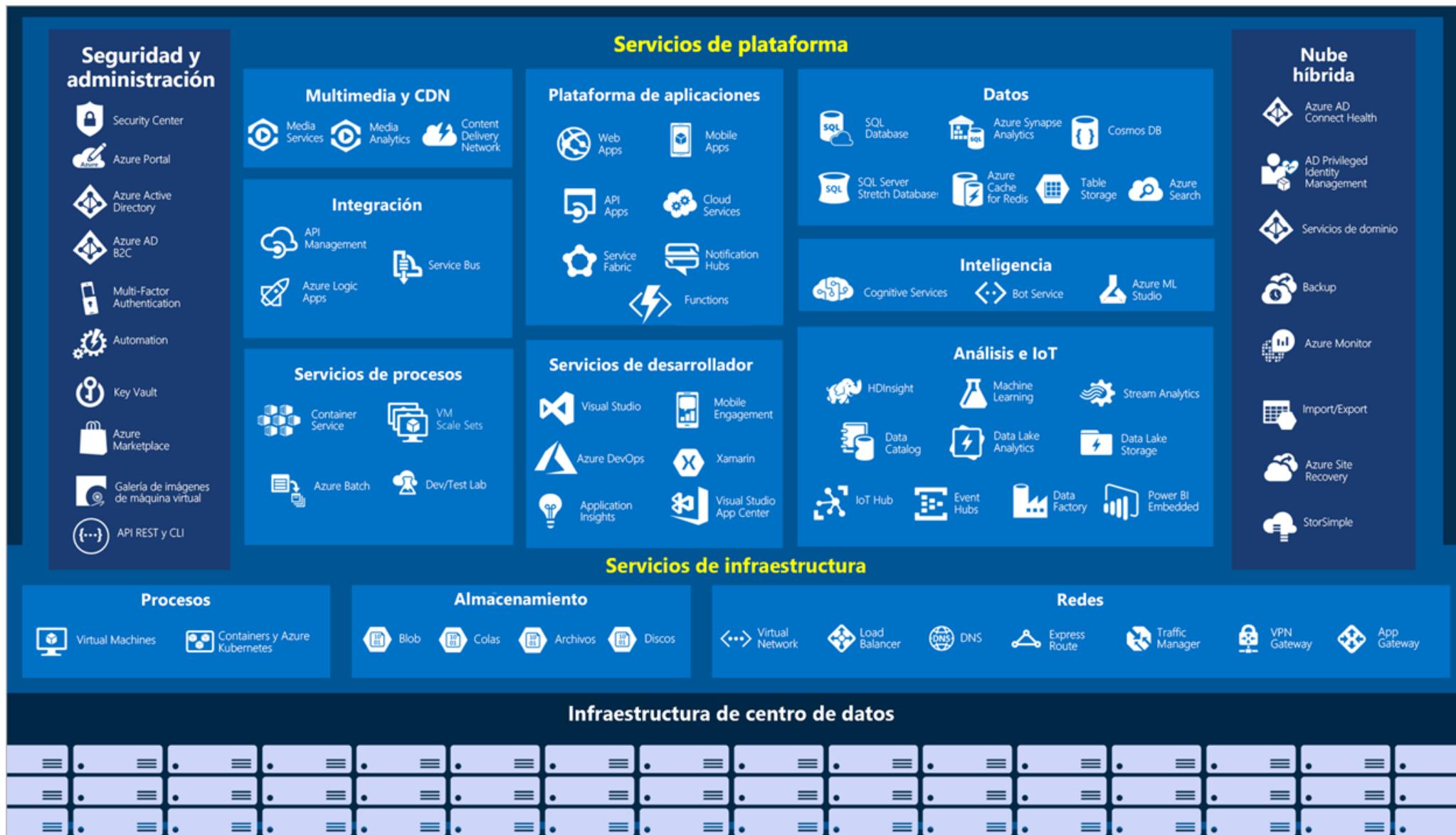
Resource
groups



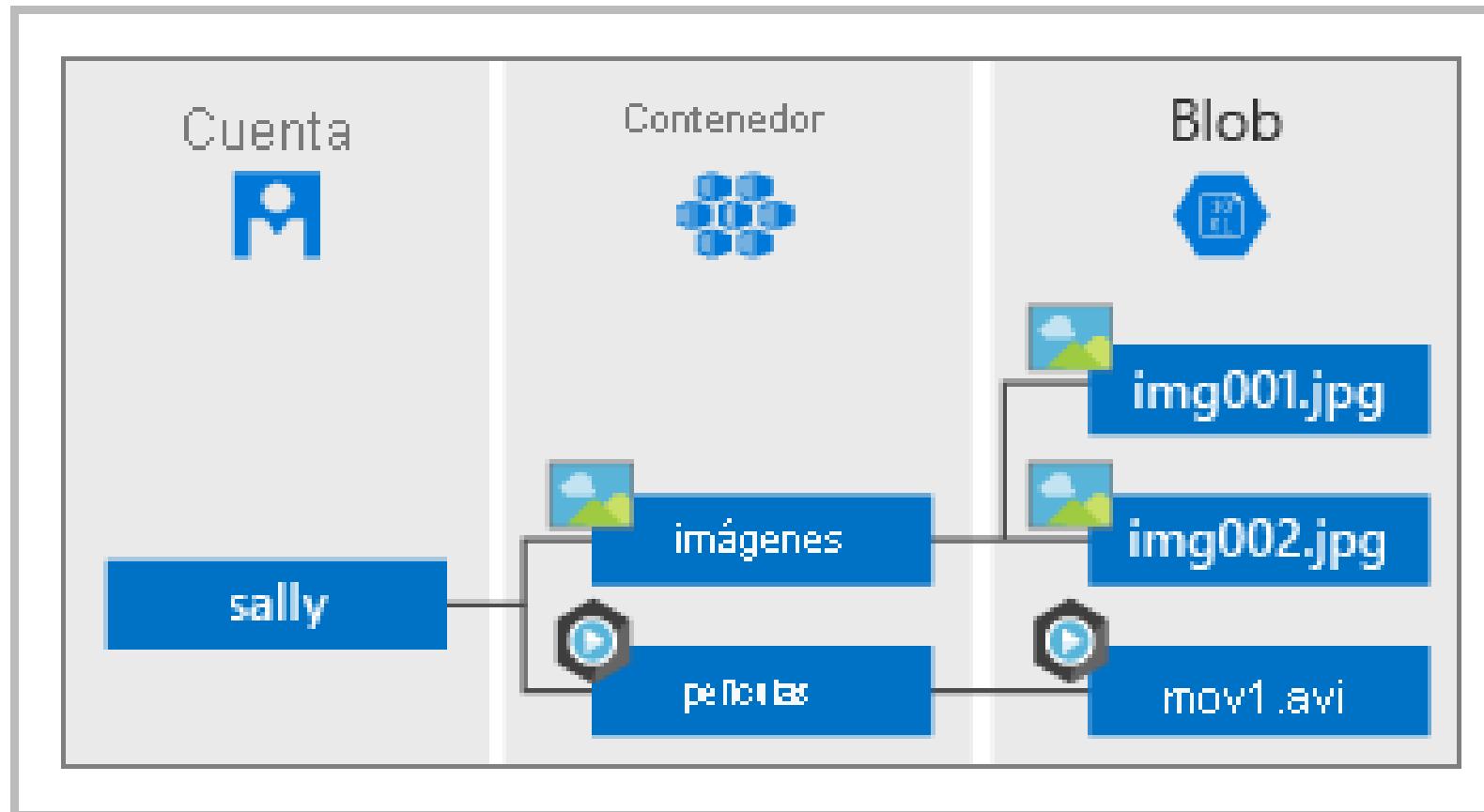
Virtual
machines



SQL
databases



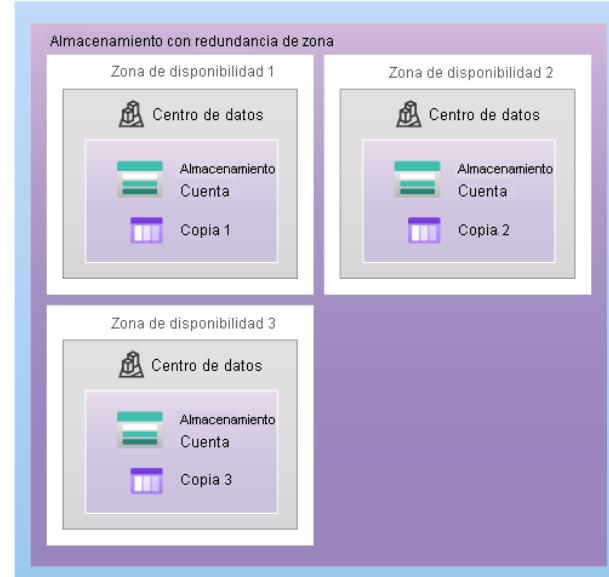
CUENTAS DE ALMACENAMIENTO



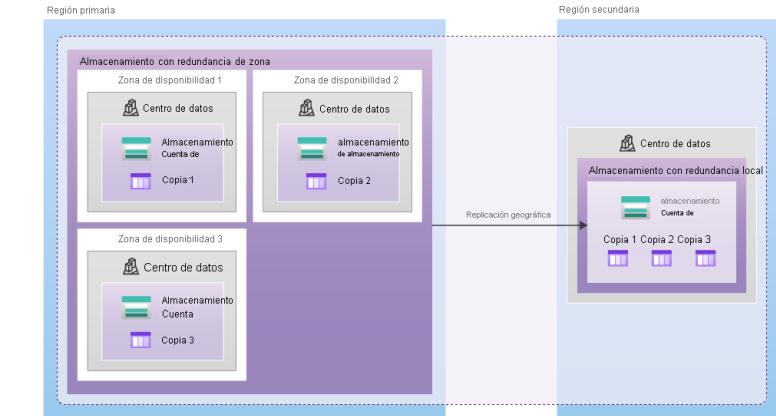
Región primaria



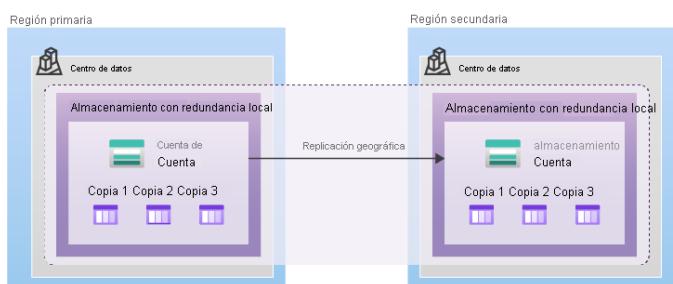
Región primaria



Acceso de lectura
Almacenamiento con redundancia de zona geográfica



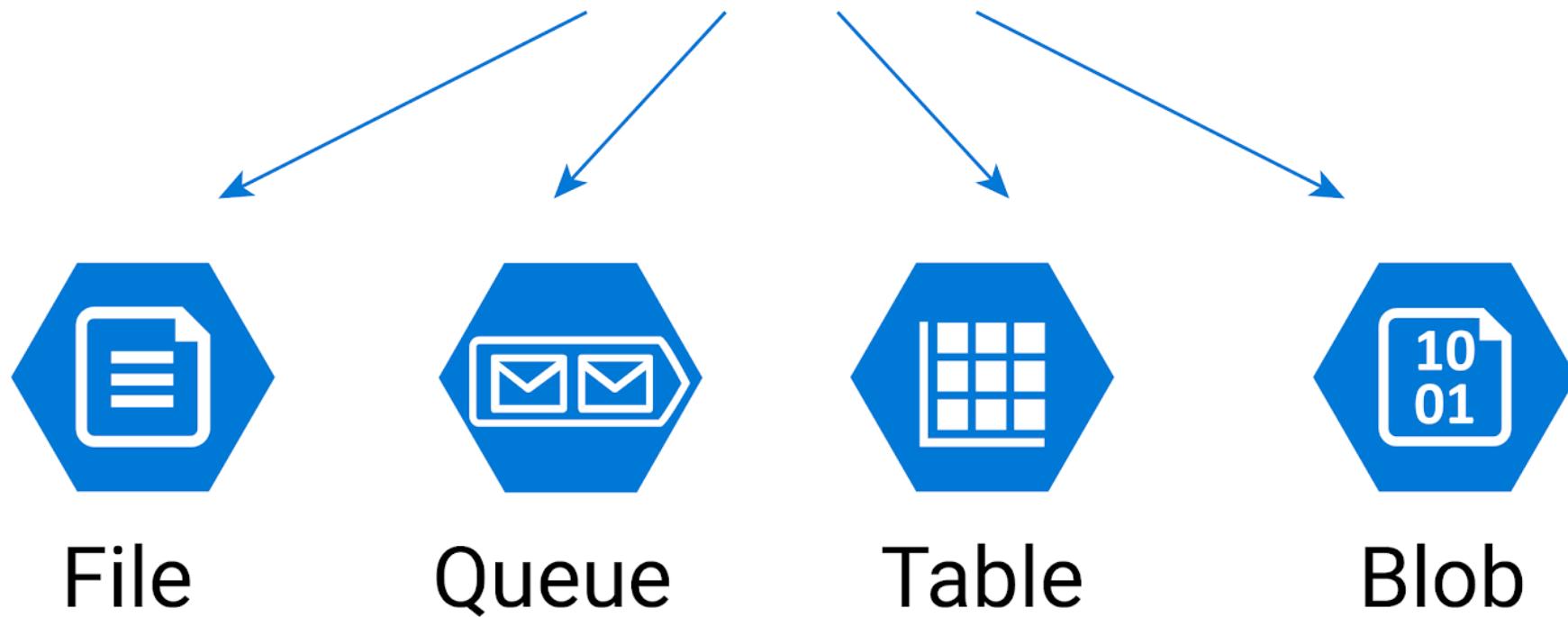
Acceso de lectura
Almacenamiento con redundancia geográfica



REDUNDANCIA

SERVICIOS

Storage



NIVELES DE ACCESO

adfquickstartstorage | Configuration

Storage account

Search

Save Discard Refresh

The cost of your storage account depends on the usage and the options you choose below. [Learn more about storage pricing](#)

Account kind: StorageV2 (general purpose v2)

Performance: Standard (selected) Premium

This setting cannot be changed after the storage account is created.

Secure transfer required: Enabled

Allow Blob public access: Disabled (selected) Enabled

Allow storage account key access: Enabled

Allow recommended upper limit for shared access signature (SAS) expiry interval: Enabled

Default to Azure Active Directory authorization in the Azure portal: Enabled

Minimum TLS version: Version 1.0

Permitted scope for copy operations (preview): From any storage account

Configuration (selected)

Configuration (highlighted)

Data Lake Gen2 upgrade

Resource sharing (CORS)

Advisor recommendations

Endpoints

Locks

Blob access tier (default): Cool (selected) Hot

Large file shares: Enabled

Disabled (selected) Enabled

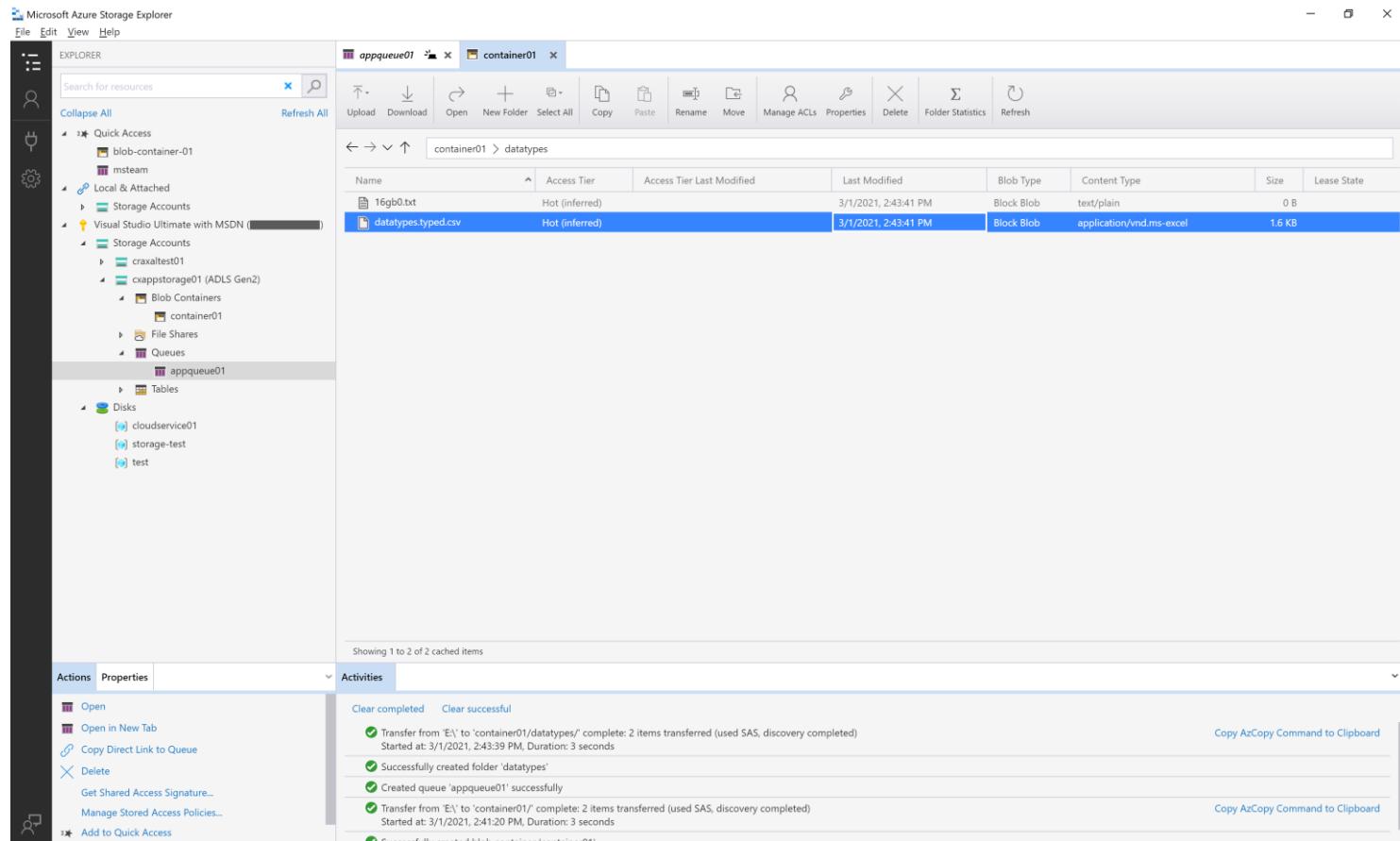
CICLO DE VIDA

Agregar una regla ...

Detalles 2 Blobs de base

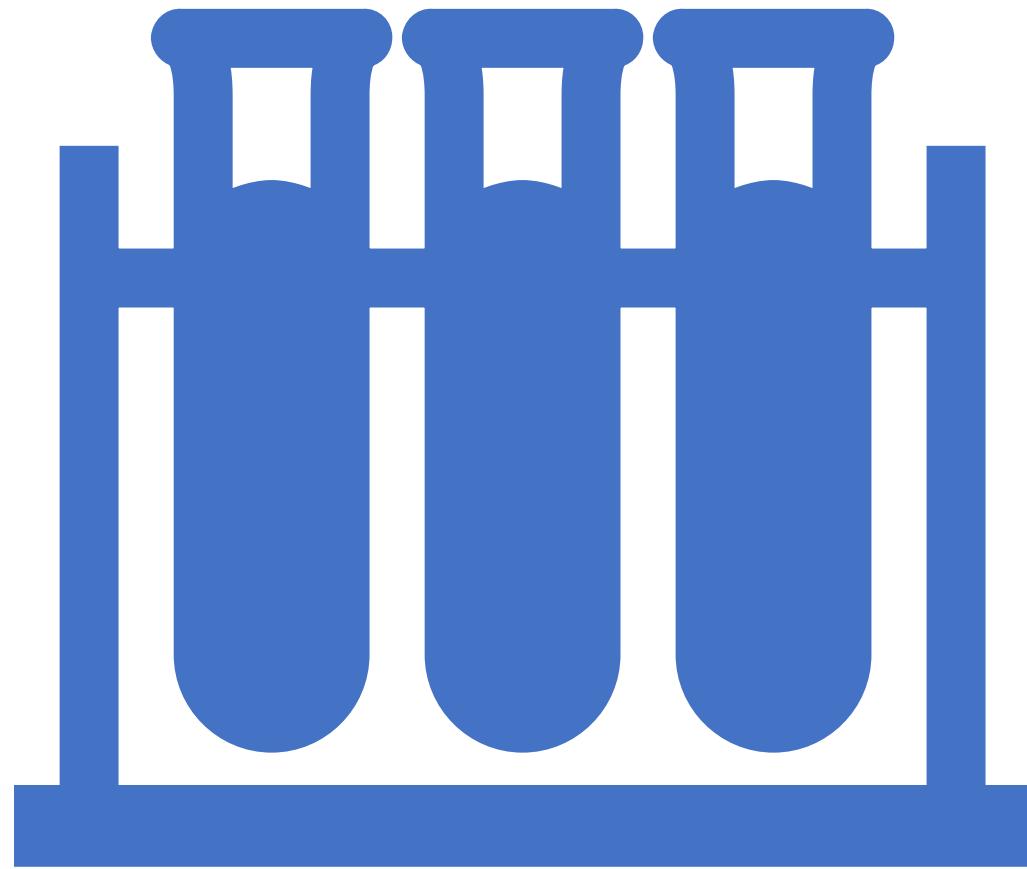
La administración del ciclo de vida usa sus reglas para mover automáticamente los blobs a niveles de acceso esporádico o para eliminarlos. Si crea varias reglas, las acciones asociadas deben implementarse en orden de nivel (desde el almacenamiento de acceso frecuente hasta el almacenamiento de acceso esporádico, luego archivado, luego eliminación).

Si	
<p>Los blobs de base se *</p> <p><input checked="" type="radio"/> Modificaron por última vez</p> <p><input type="radio"/> Crearon</p>	
<p>Hace más de (días) *</p> <p>Introduzca un valor</p>	
<p>↓</p>	
<p>Entonces</p>	
<p>Elimine el blob</p>	
<p>Mover al almacenamiento esporádico</p>	
<p>Para los datos a los que se accede con poca frecuencia y que quiere conservar en un almacenamiento de acceso...</p>	
<p>Muévalo al almacenamiento de archivo</p>	
<p>Utilícelo si no necesita acceso en línea y quiere conservar el objeto durante 180 días o más.</p>	
<p>Elimine el blob</p>	
<p>Elimina el objeto según las condiciones especificadas.</p>	



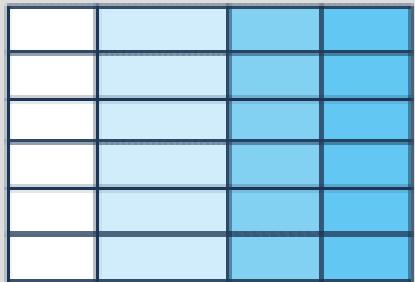
AZURE STORAGE EXPLORER

LABORATORIO

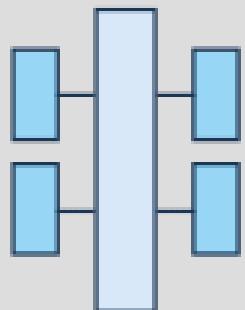


SQL

Relational



Analytical (OLAP)

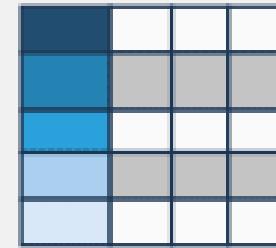


NoSQL

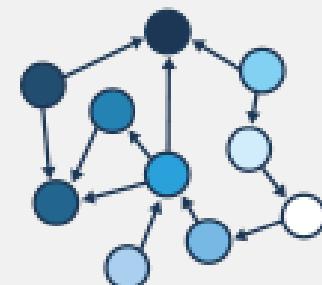
Key-Value



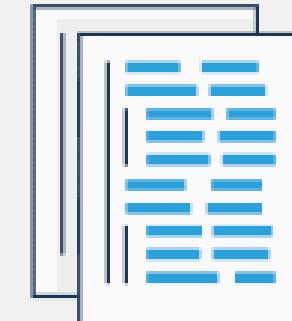
Column-Family

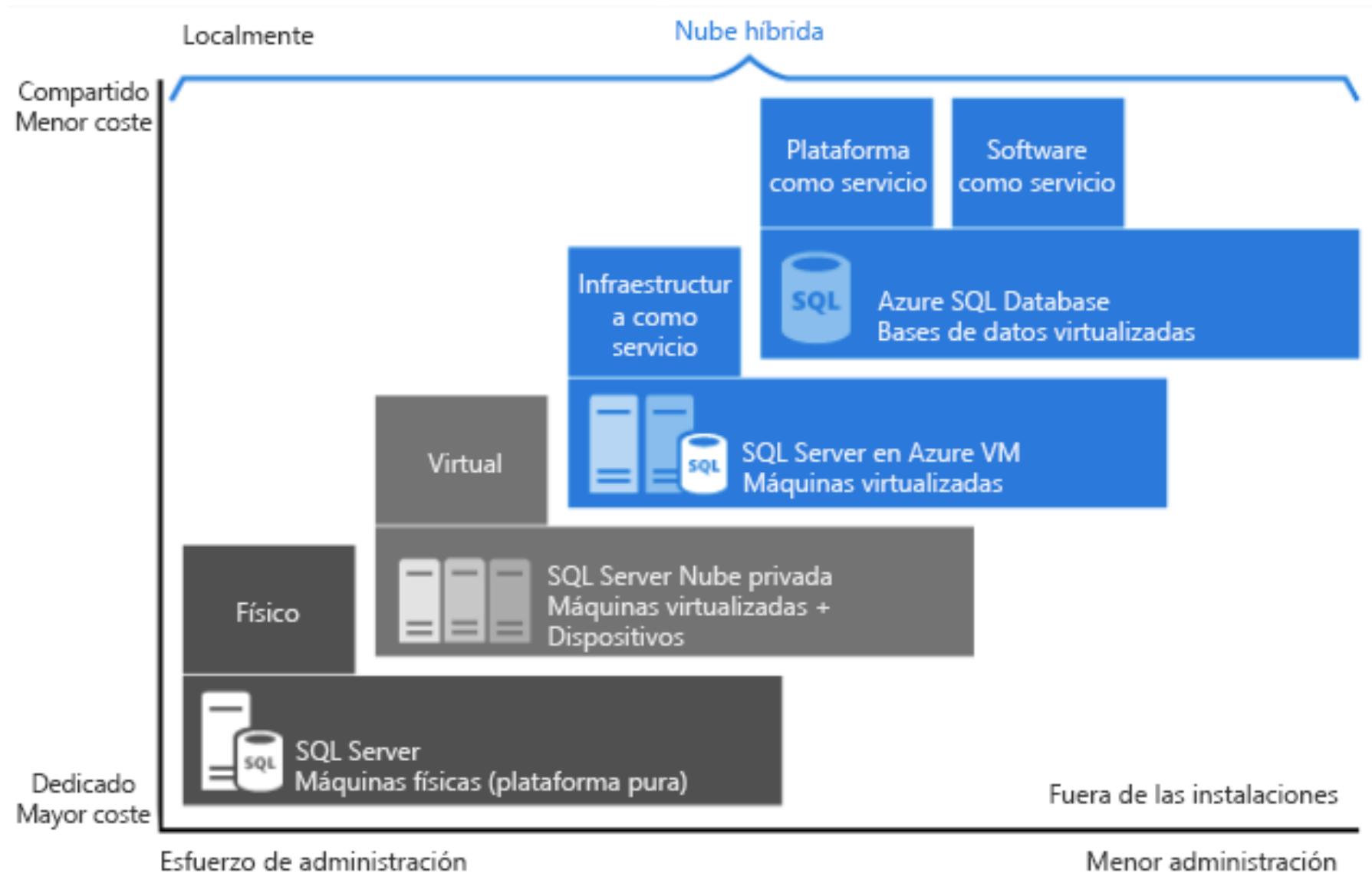


Graph

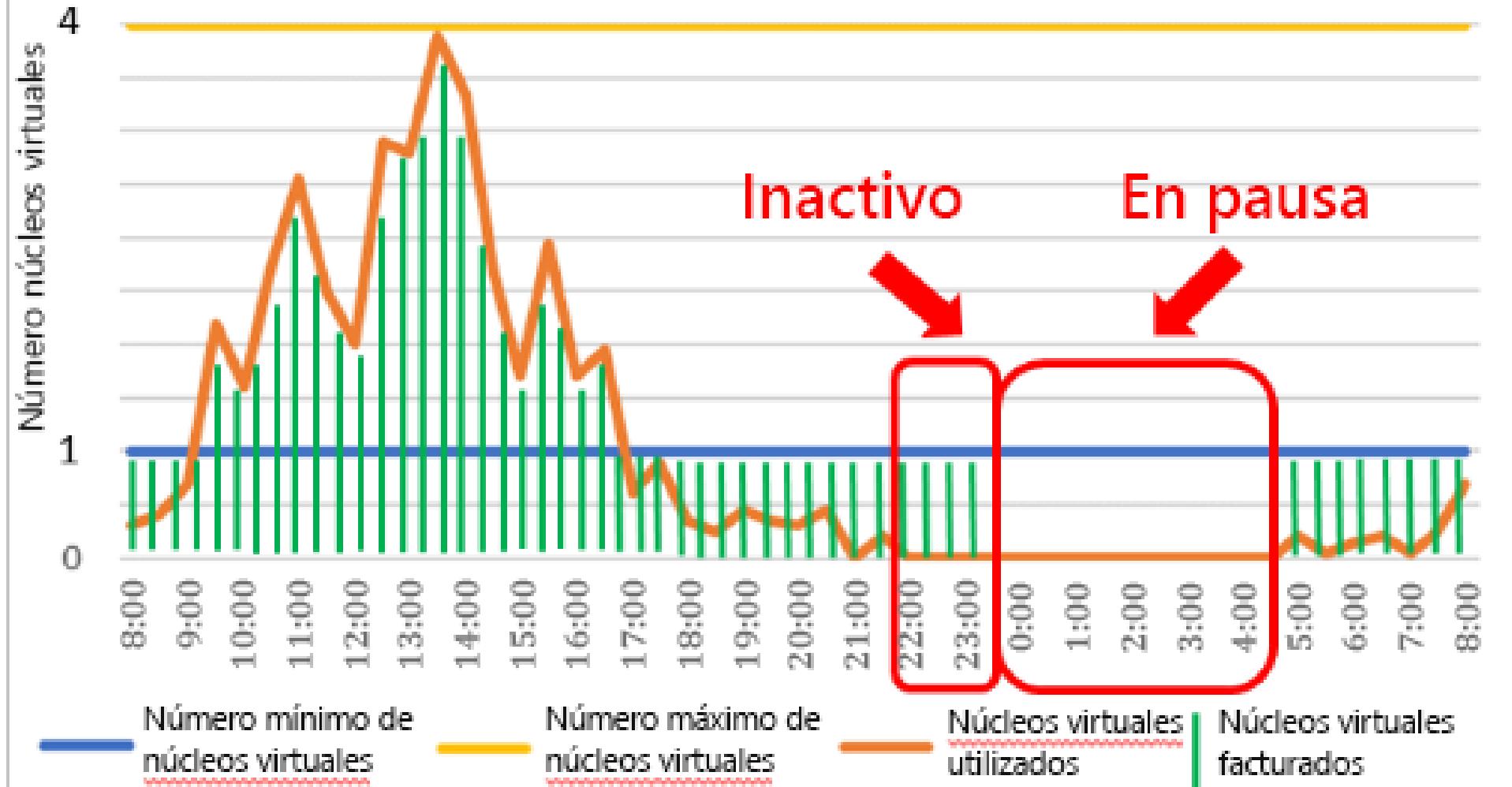


Document





Uso de CPU



Hardware de proceso

Haga clic en "Cambiar configuración" para ver los detalles de todas las generaciones de hardware disponibles, incluidas las opciones optimizadas para memoria y las opciones optimizadas para pro

Configuración de hardware

Gen5

hasta 16 núcleos virtuales, hasta 48 GB de memoria

[Cambiar configuración](#)

Número máximo de núcleos virtuales



Número mínimo de núcleos virtuales



MEMORIA MÍNIMA

MEMORIA MÁXIMA (%)

Crear SQL Database

Microsoft

Cree una base de datos SQL con la configuración que prefiera. Complete la pestaña de configuración básica [Crear y más](#), vaya a Revisar y crear para aprovisionar con valores predeterminados automáticos. [Más información](#)

Detalles del proyecto

Seleccione la suscripción para administrar los recursos implementados y los costos. Utilice grupos de recursos como carpetas para organizar y administrar todos sus recursos.

Suscripción * ⓘ

Dev-Test-Lab

└ Grupo de recursos* ⓘ

Contoso

[Crear nuevo](#)

Detalles de la base de datos

Indique la configuración necesaria para esta base de datos, incluida la selección de un servidor lógico y la configuración de los recursos de almacenamiento.

Nombre de la base de datos*

Widgets

Servidor ⓘ

:contososql1 (West US)

[Crear nuevo](#)

¿Quiere usar un grupo elástico de SQL? *

Sí No

Proceso y almacenamiento*

De uso general

Generación 5, 2 núcleos virtuales y 32 GB de almacenamiento

[Configurar base de datos](#)

[Revisar y crear](#)

[Siguiente >](#)

Redes

MOTORES DE BASES DE DATOS NoSQL



Son BD que priorizan el acceso rápido a la información por sobre la integridad de los datos



mongoDB

Orientada a documentos. Sus datos son almacenados en BSON, que es una representación binaria de JSON



lyft



ArangoDB

Utiliza su lenguaje llamado AQL y esto le permite crear estructuras de tipo clave/valor, relacionales y grafos.

opentext™

BARCLAYS

CISCO



AZURE COSMOS DB



Multi-modelo, de distribución global y escalado horizontal.

Desarrollada por Microsoft

Coca-Cola



GOOGLE CLOUD FIRESTORE

De uso en la nube. Permite transacciones ACID y posee soporte sin conexión.

WIX
The New York Times



AMAZON DYNAMODB

Su servicio es 100% server-less. Provee escalabilidad automática y permite transacciones seguras



mercado libre



redis

Su popularidad se debe a su almacenamiento de datos en memoria RAM.

Airbnb
Instagram
slack

¿Qué motores de BD NoSQL son tus favoritos? ¿Por qué?

 ed.team/cursos/sql

{
 "x": [...]
}

Documents



Graphs

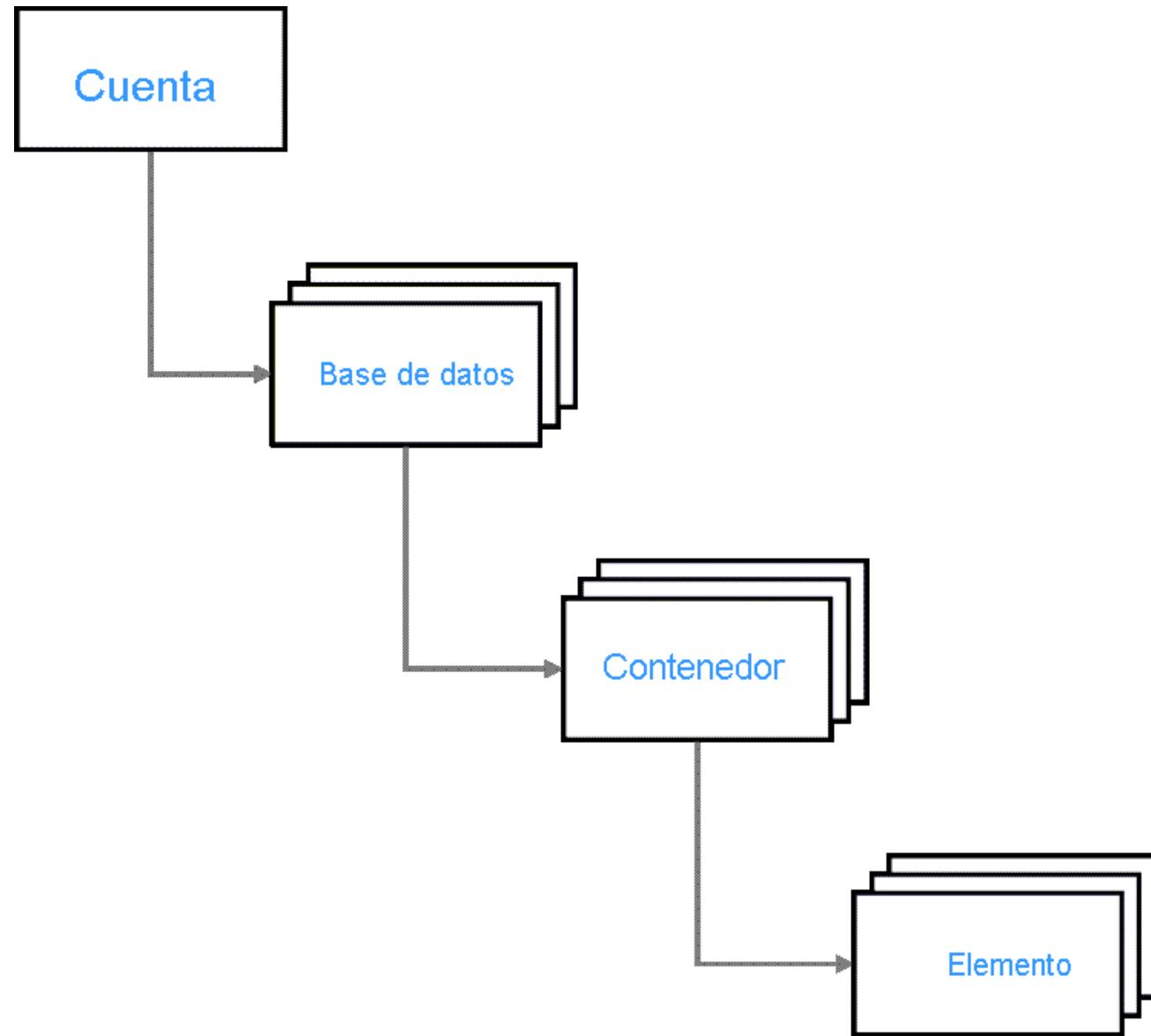


Key-Value Tables

Key	Value

Column Family Stores

Col1	Col2	Col3



Which API best suits your workload?

Azure Cosmos DB is a fully managed NoSQL database service for building scalable, high performance applications. [Learn more](#)

To start, select the API to create a new account. The API selection cannot be changed after account creation.

Azure Cosmos DB for NoSQL

Azure Cosmos DB's core, or native API for working with documents. Supports fast, flexible development with familiar SQL query language and client libraries for .NET, JavaScript, Python, and Java.

[Create](#)[Learn more](#)

Azure Cosmos DB for MongoDB

Fully managed database service for apps written for MongoDB. Recommended if you have existing MongoDB workloads that you plan to migrate to Azure Cosmos DB.

[Create](#)[Learn more](#)

Azure Cosmos DB for Apache Cassandra

Fully managed Cassandra database service for apps written for Apache Cassandra. Recommended if you have existing Cassandra workloads that you plan to migrate to Azure Cosmos DB.

[Create](#)[Learn more](#)

Azure Cosmos DB for Table

Fully managed database service for apps written for Azure Table storage. Recommended if you have existing Azure Table storage workloads that you plan to migrate to Azure Cosmos DB.

[Create](#)[Learn more](#)

Azure Cosmos DB for Apache Gremlin

Fully managed graph database service using the Gremlin query language, based on Apache TinkerPop project. Recommended for new workloads that need to store relationships between data.

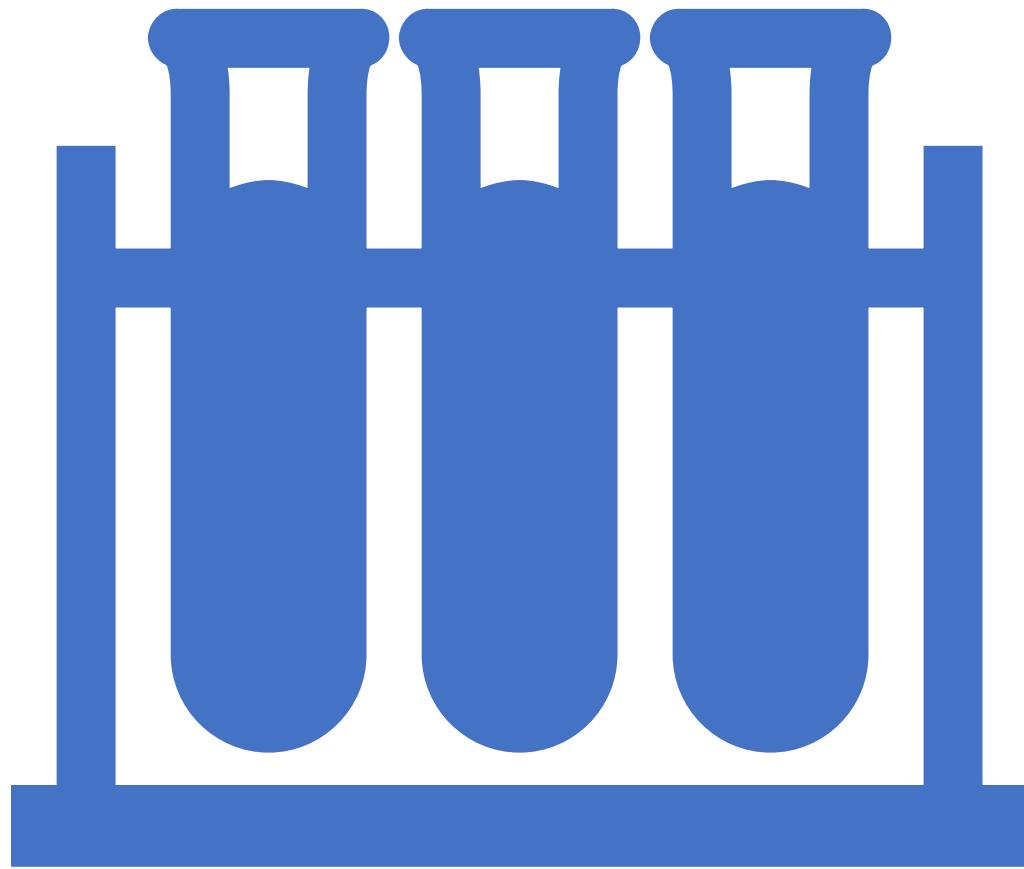
[Create](#)[Learn more](#)

Azure Cosmos DB for PostgreSQL

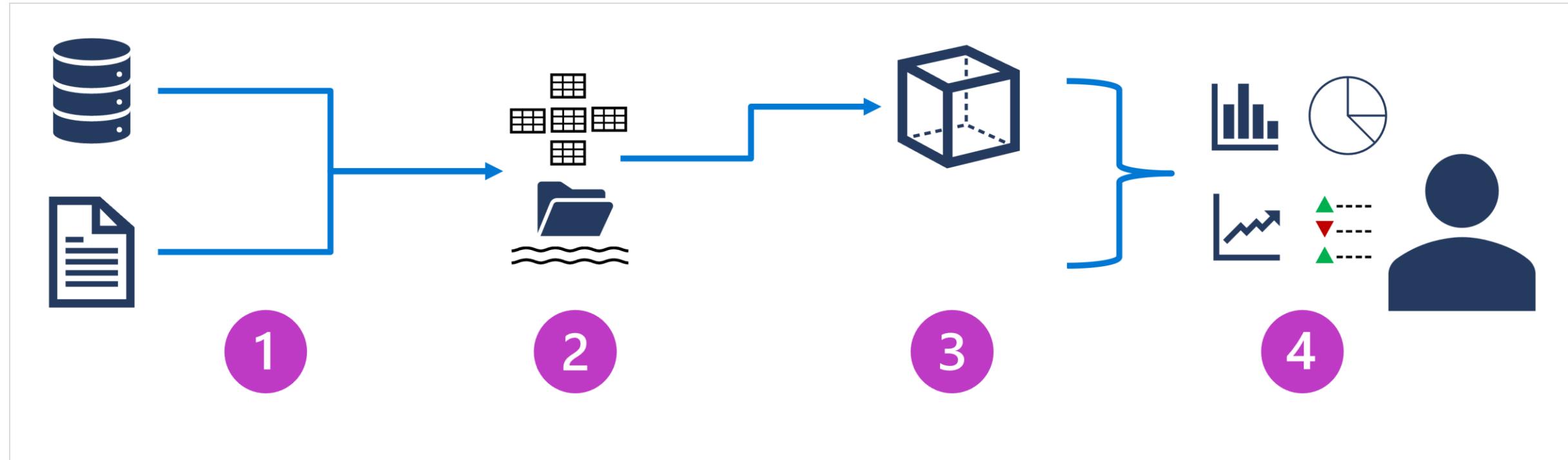
Fully-managed relational database service for PostgreSQL with distributed query execution, powered by the Citus open source extension. Build new apps on single or multi-node clusters—with support for JSONB, geospatial, rich indexing, and high-performance scale-out.

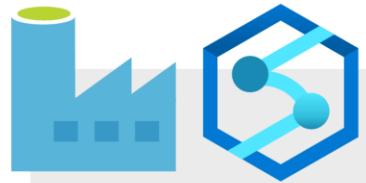
[Create](#)[Learn more](#)

LABORATORIO

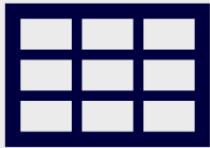


ARQUITECTURA SYNAPSE



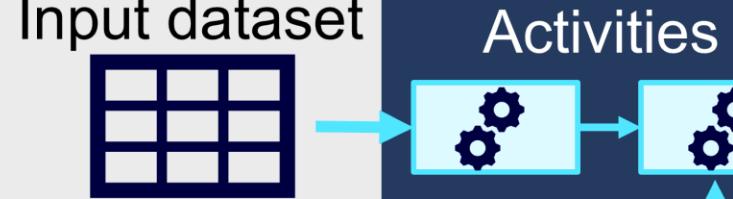


Input dataset

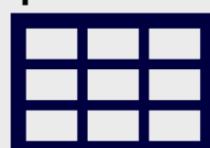


Pipeline

Activities



Output dataset



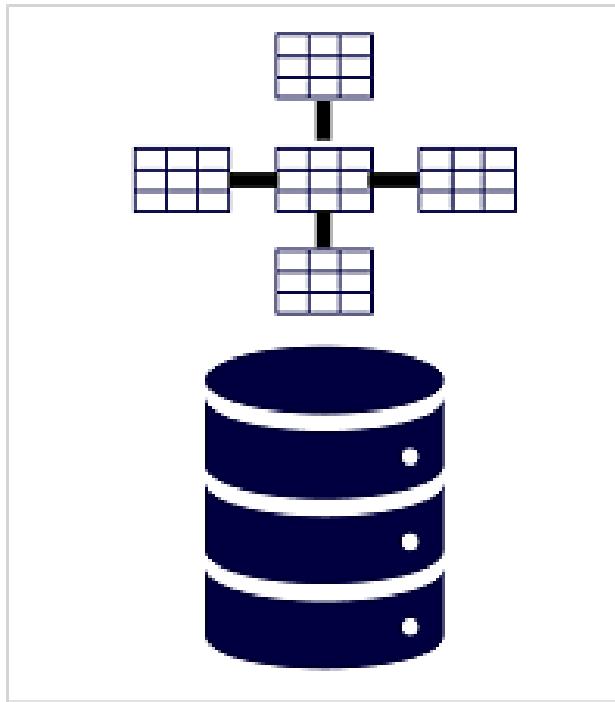
Linked services





SERVICIOS PAAS

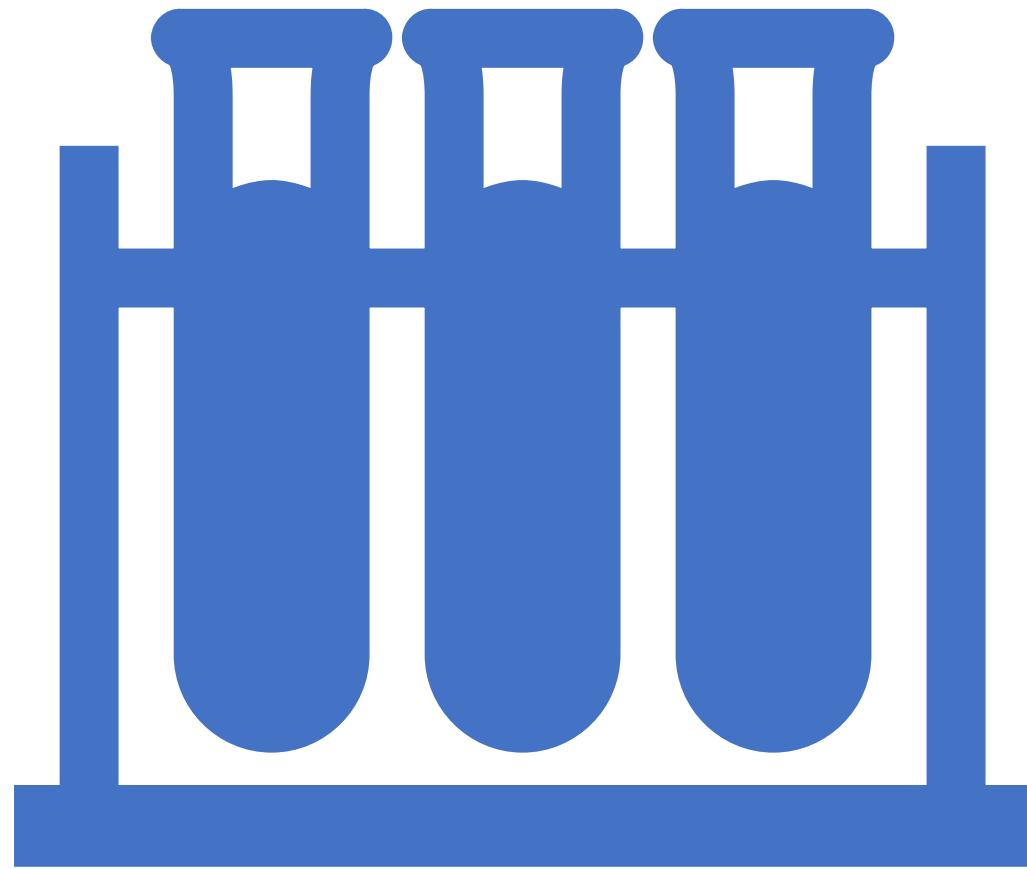
DATA WAREHOUSE VS DATA LAKE





HD INSIGHT

LABORATORIO



OnlineStore | APIs API Management service

Search (Ctrl+ /) Search APIs Filter by tags Group by tag

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Events

+ Add API All APIs ProductFunction4affc41f... ...

Settings Properties Locks

APIs APIs Products Subscriptions Named values Backends API Tags Power Platform OAuth 2.0 + OpenID Connect

Monitoring Application Insights Metrics

Deployment + infrastructure External cache Custom domains

Security Managed identities

Define a new API

- HTTP** Manually define an HTTP API
- WebSocket** Streaming, full-duplex communication with a WebSocket server
- GraphQL** Preview Access the full capabilities of your data from a single endpoint.

Create from definition

- OpenAPI** Standard, language-agnostic interface to REST APIs
- WADL** Standard XML representation of your RESTful API
- WSDL** Standard XML representation of your SOAP API

Create from Azure resource

- Logic App** Scalable hybrid integrations and workflows.
- App Service** API hosted on App Service.
- Function App** Serverless, event driven experience on App Service.

Integración
de datos

Ingeniería
de datos

Almacenamiento
de datos

Ciencia
de datos

Análisis en
tiempo real

Inteligencia
empresarial

Del conocimiento
a la acción



Data
Factory



Ingeniería de datos
de Synapse



Almacenamiento de
datos de Synapse



Ciencia de datos de
Synapse



Análisis en tiempo
real de Synapse



Power BI



Data Activator
(próximamente)



OneLake

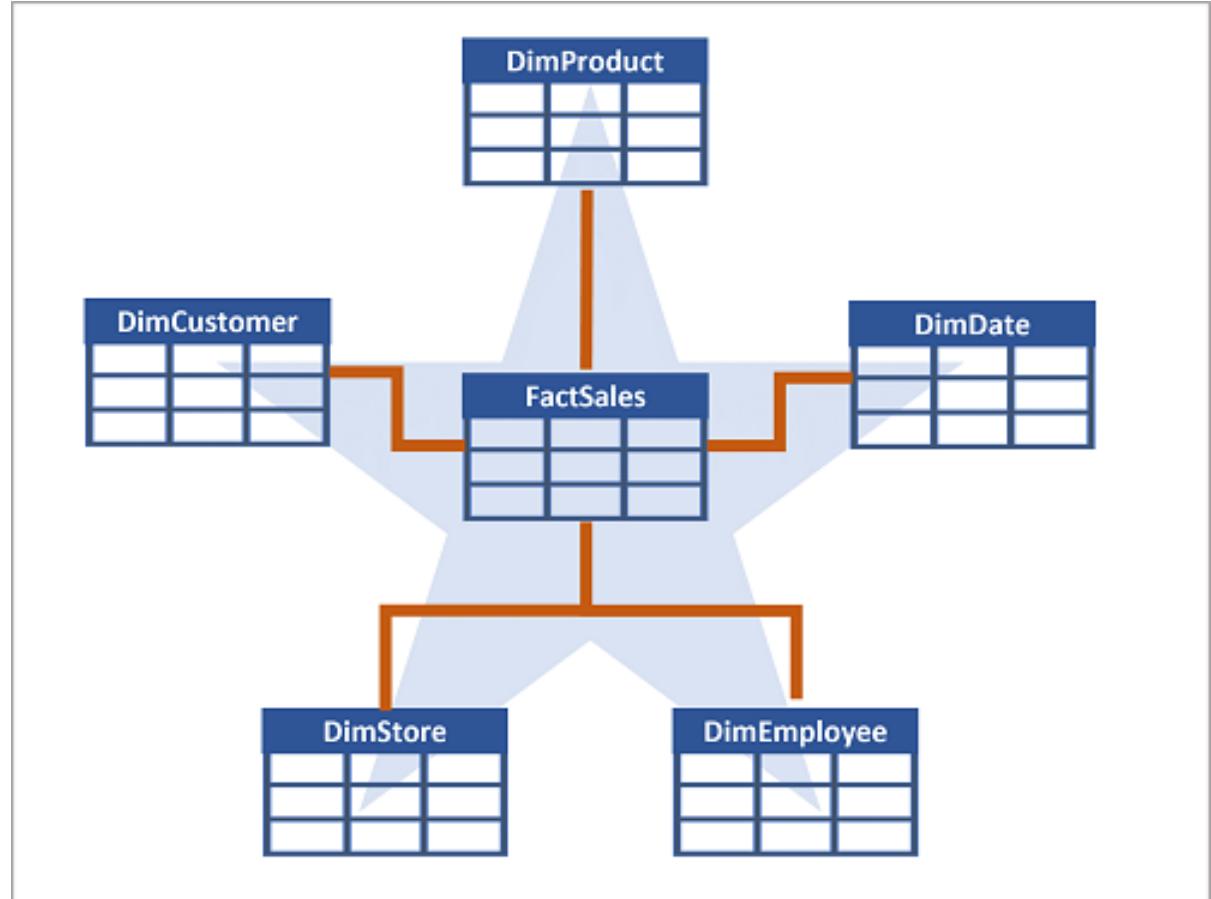
Base SaaS

MICROSOFT FABRIC

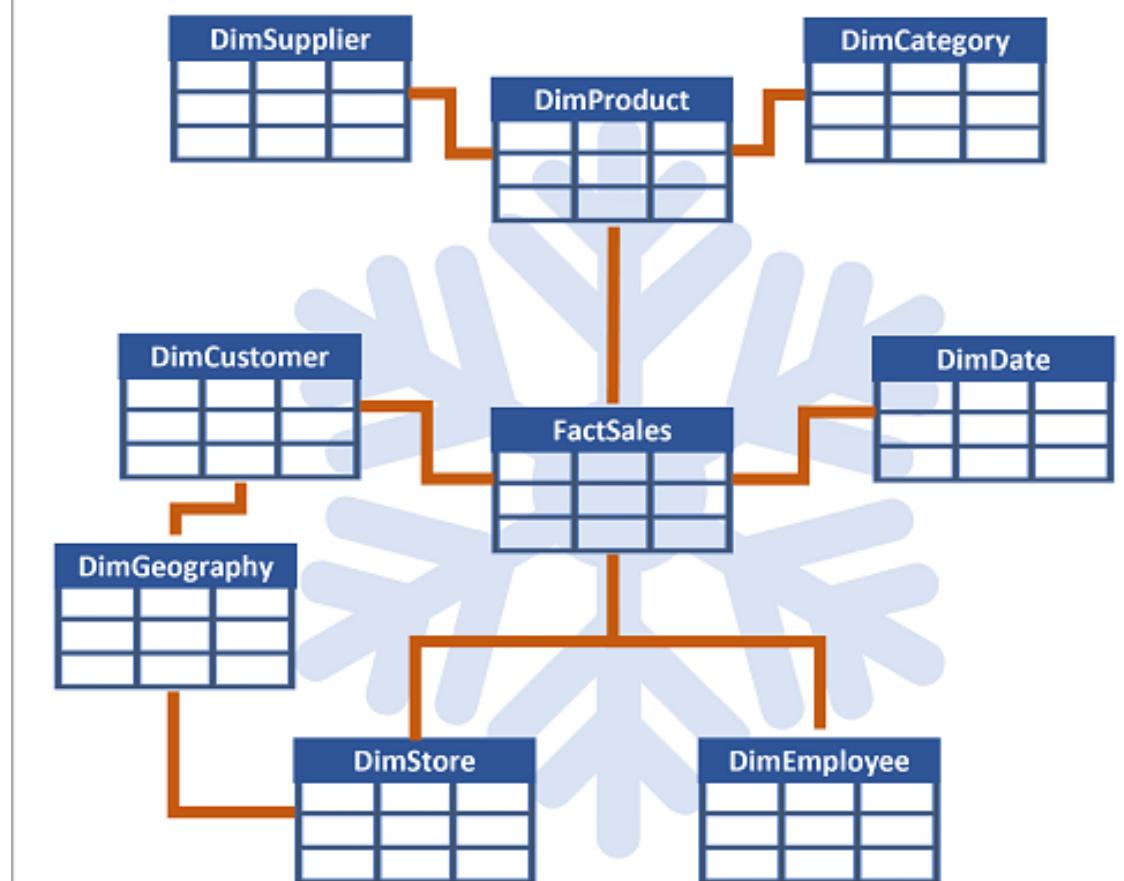


- El proceso de creación de un almacenamiento de datos moderno normalmente se compone de las siguientes partes:
 - Ingesta de datos: traslado de datos desde sistemas de origen a un almacenamiento de datos.
 - Almacenamiento de datos: almacenamiento de los datos en un formato optimizado para el análisis.
 - Procesamiento de datos: transformación de los datos en un formato listo para su consumo con las herramientas de análisis.
 - Análisis y entrega de datos: análisis de los datos para obtener información y entrega de los mismos a la empresa.

DISEÑO ESTRELLA



DISEÑO COPO DE NIEVE

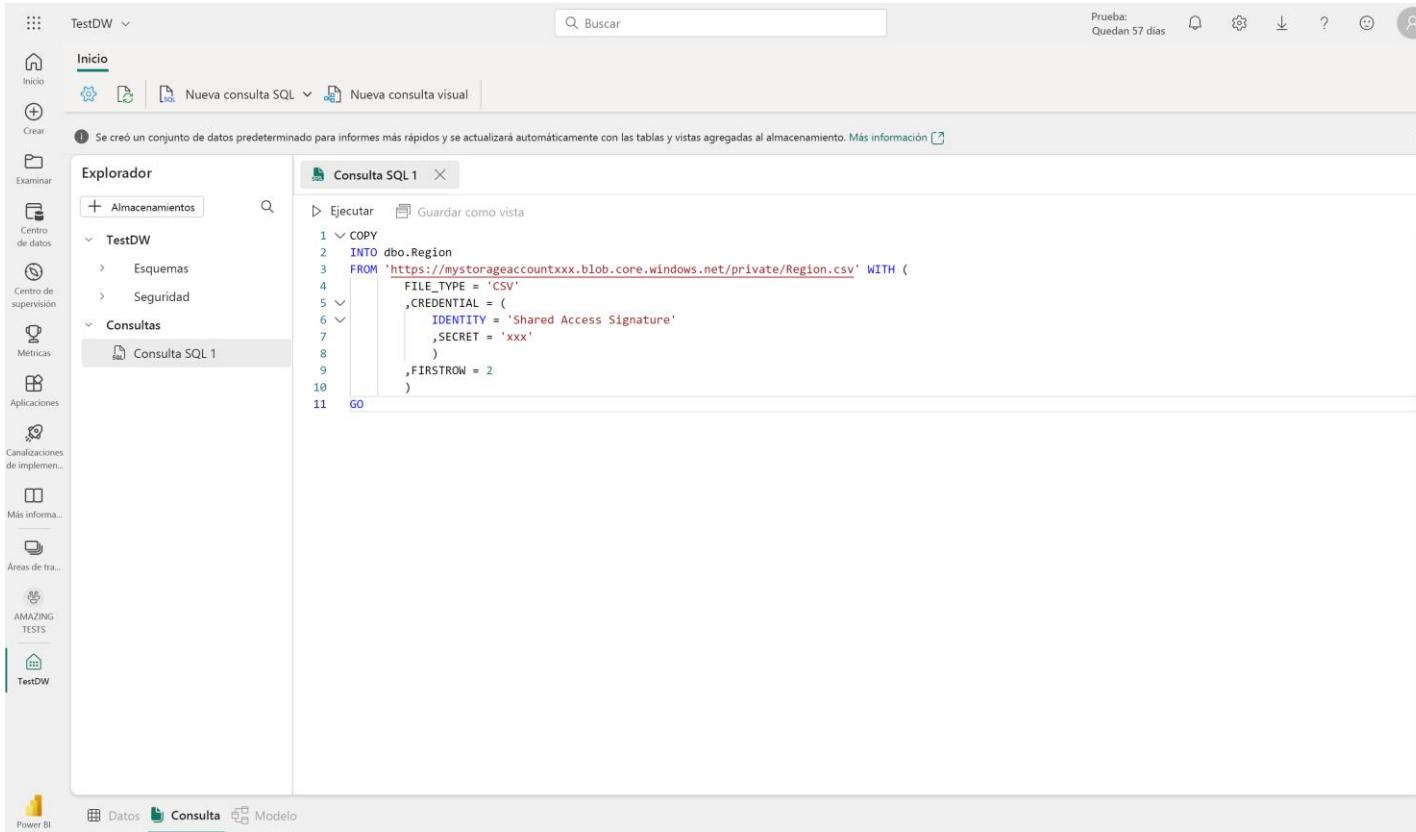


ALMACENAMIENTO EN FABRIC

The screenshot shows the Microsoft Power BI desktop application interface. The left sidebar contains navigation options: Inicio, Crear, Examinar, Centro de datos, Centro de supervisión, Métricas, Aplicaciones, Canalizac., Más información, Áreas de trabajo, and DP-000. The main workspace displays several cards:

- Cree su primer informe**: Includes steps: Agregar y preparar los datos, Generar un informe predefinido, Personalizar para adaptar a sus necesidades.
- Agregue datos para empezar a crear un informe**: Options: Pegar o introducir datos manualmente, Elegir un conjunto de datos publicado.
- Otros elementos que puede crear con Microsoft Fabric**: Options include: Almacén de lago, Almacén (highlighted with a red border), Flujo de datos Gen2 (versión preliminar), and Cuaderno. A "Ver todo" link is also present.

CREAR TABLAS

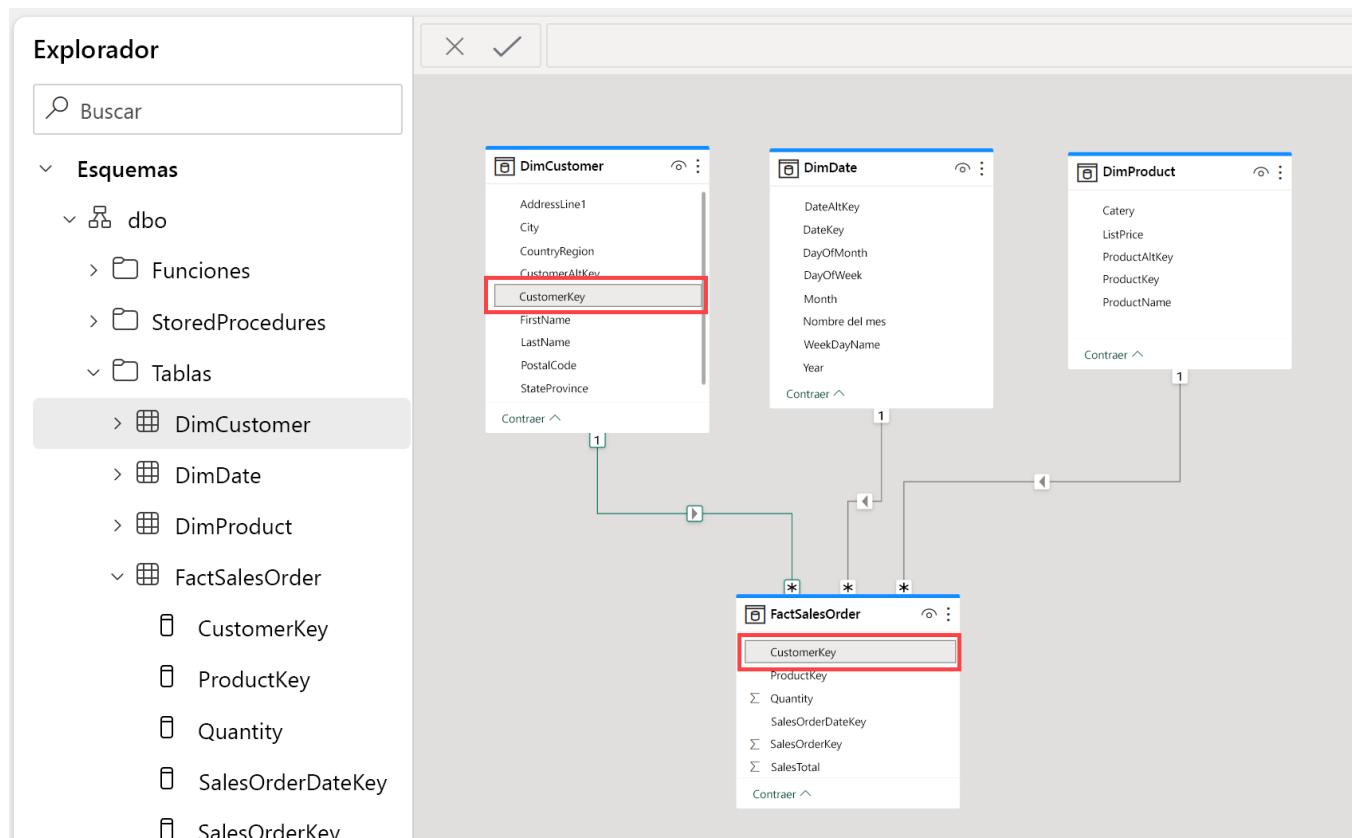


EDITOR VISUAL

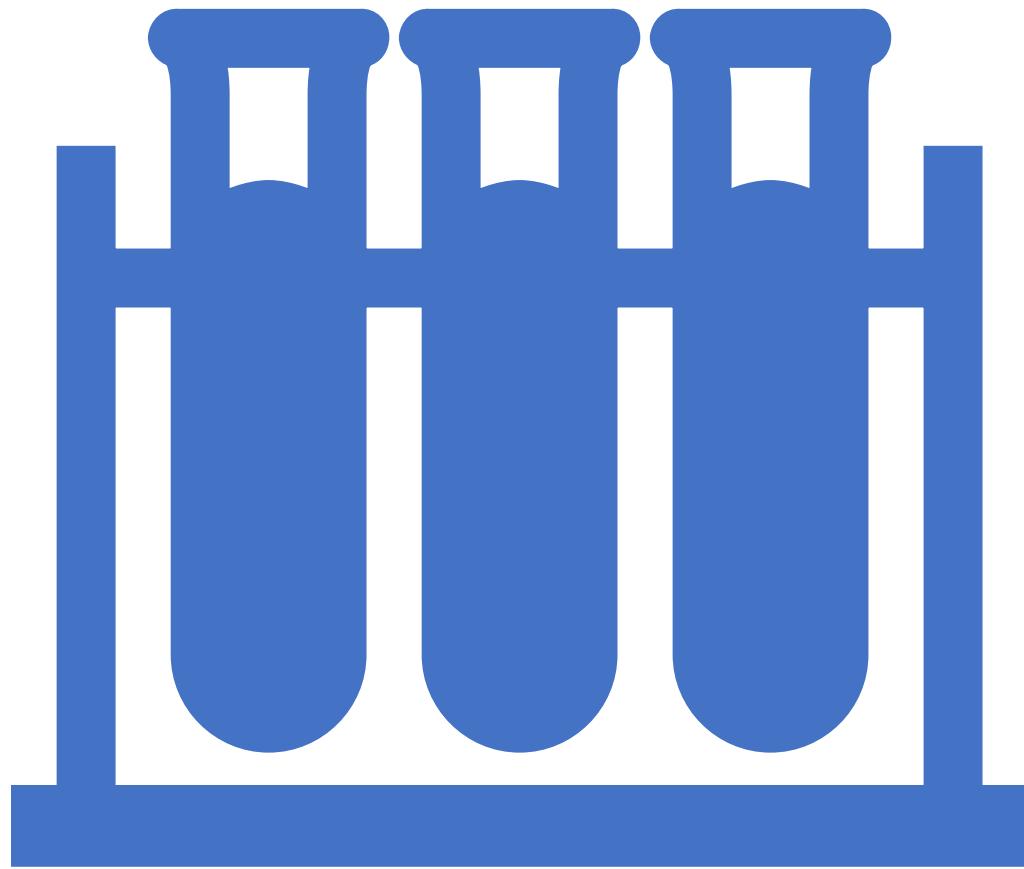
The screenshot shows the Power BI Visual Editor interface. On the left, the ribbon navigation bar includes 'Inicio', 'Crear', 'Explorador', 'Centro de datos', 'Aplicaciones', 'Métricas', 'Centro de supervisión', 'Cuestionarios de implementación', 'Más información', 'Áreas de trabajo', 'Dataflows y Dev AI', and two specific dataflows: 'DP000DW' and 'DP000W'. The main workspace displays a data flow diagram for 'Consulta visual 1'. The diagram consists of three tables: 'DimProduct', 'FactSalesOrder', and 'FactSalesOrderDetail'. Arrows indicate relationships between them. A context menu is open over the 'FactSalesOrder' table, listing options like 'Administrar columnas', 'Reducir filas', 'Ordenar', 'Combinar', and 'Transformar'. Below the diagram, a preview table shows data from the query:

SalesOrderKey	SalesOrderDateKey	ProductKey	CustomerKey	Cantidad	SalesTotal	ProductName
3306	20221121	843	400	2	50	Cable Lock
4685	20220819	843	52	5	120	Cable Lock
4600	20220821	843	2950	9	225	Cable Lock
5007	20221011	843	29581	3	75	Cable Lock
3734	20220317	843	400	11	275	Cable Lock
3917	20220416	843	29778	8	200	Cable Lock
3902	20220418	843	1	8	200	Cable Lock
2932	20211024	843	665	5	125	Cable Lock
2976	20211102	843	29915	2	50	Cable Lock
3199	20211107	843	564	11	275	Cable Lock
1319	20220118	843	29911	8	200	Cable Lock
1536	20220222	843	131	5	125	Cable Lock
3558	20220224	843	214	8	200	Cable Lock

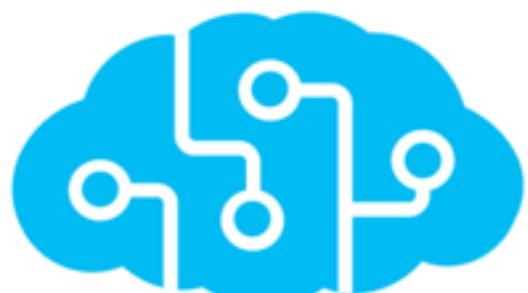
CONSTRUIR RELACIONES



LABORATORIO



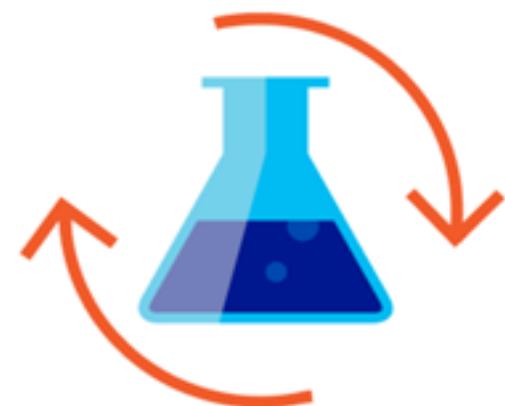
SERVICIOS DE IA EN AZURE



Pre-Built AI
Azure Cognitive Services



Conversational AI
Azure Bot Service



Custom AI
Azure Machine Learning



Announcing

Microsoft Copilot Studio

Your copilot, your way

Customize

Build

Manage

aka.ms/copilotstudio



 OpenAI



GPT-3



Codex



DALL-E 2

Azure OpenAI



Copilot

Your everyday AI companion

Automotive Price Prediction Exercise

In draft

Properties Project

Score Mod



Machine Learning

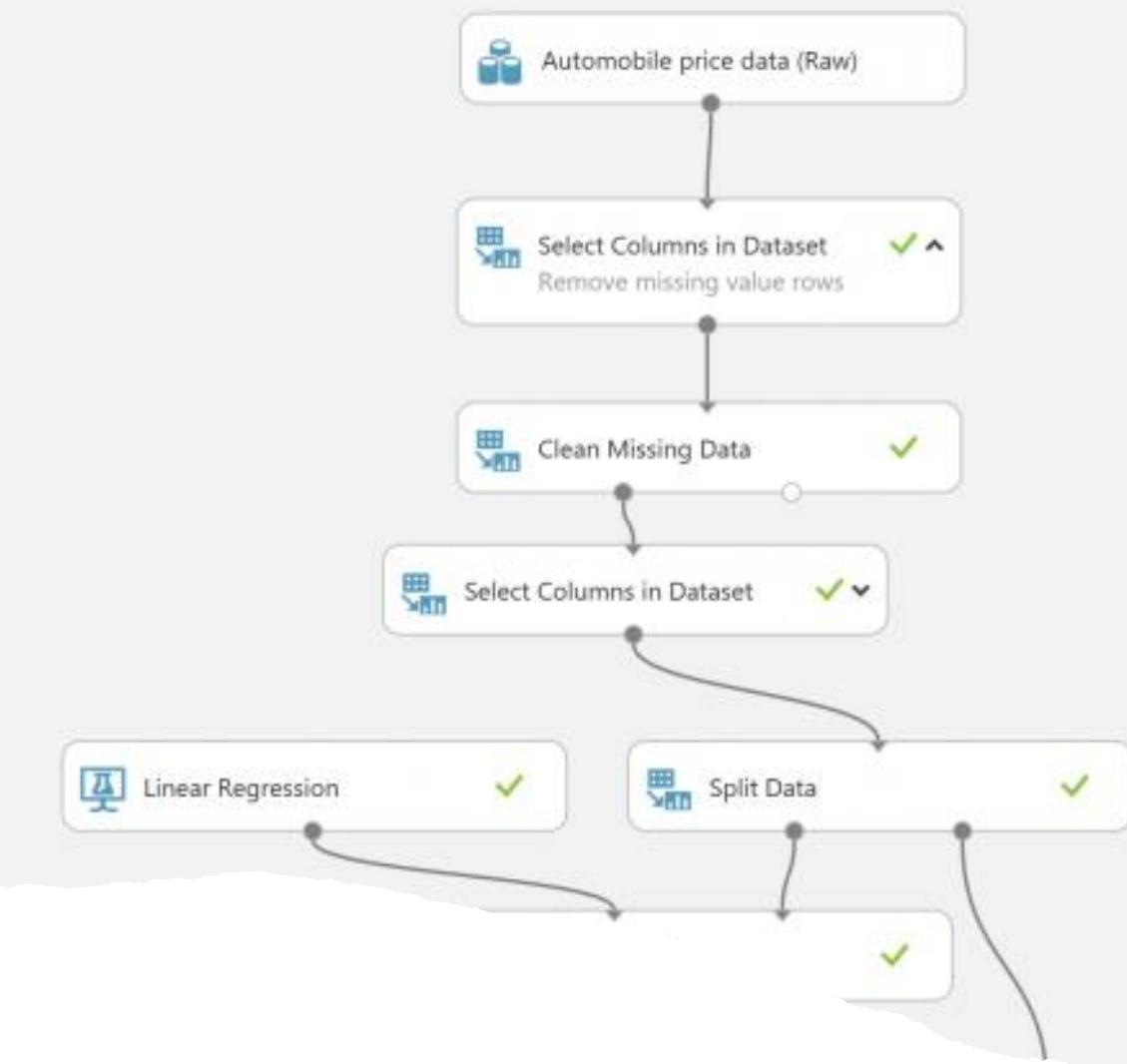
Score

Score Model

Draft saved at 8:02:17 PM



Score Model

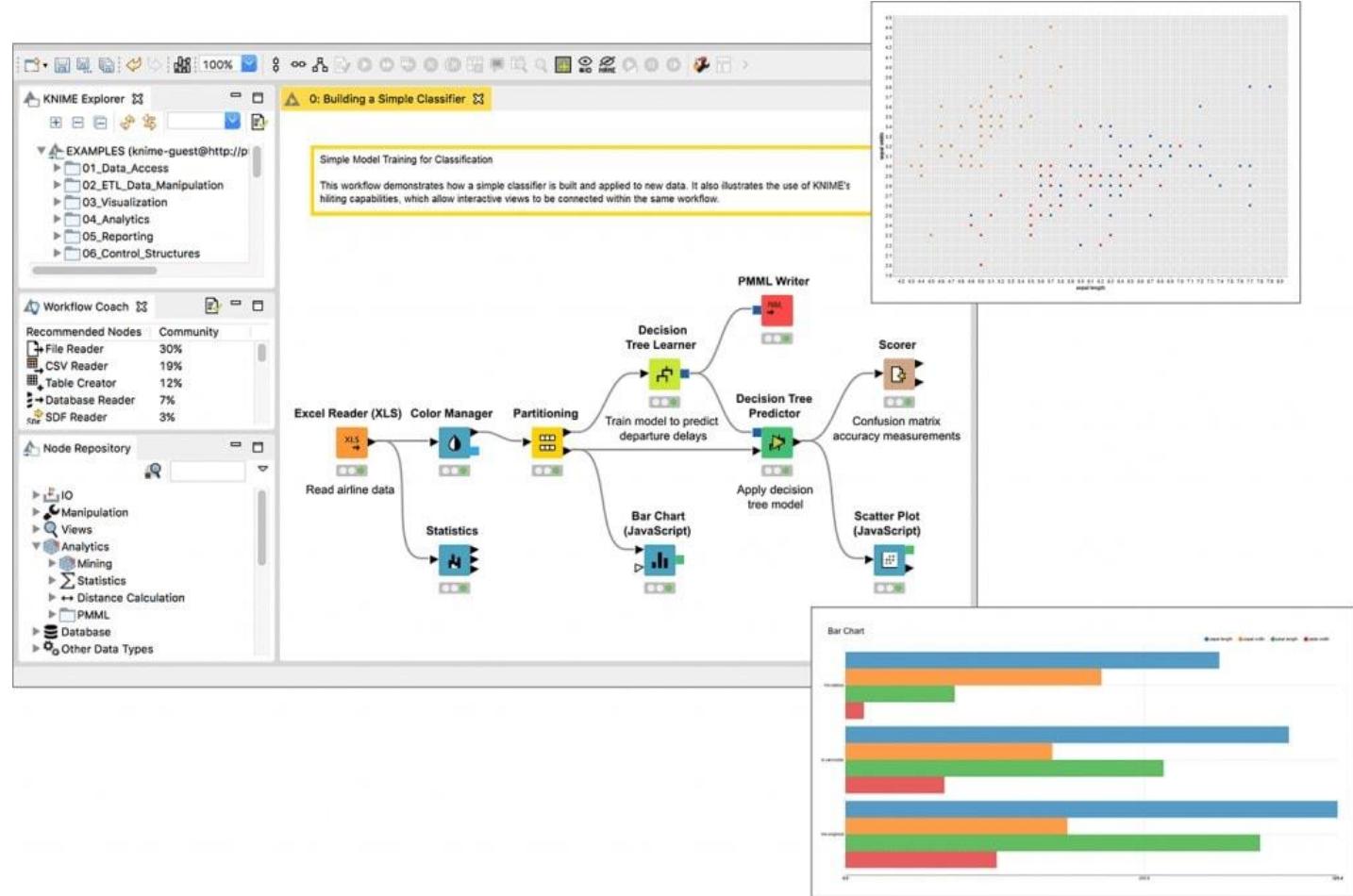
 Append score colum...

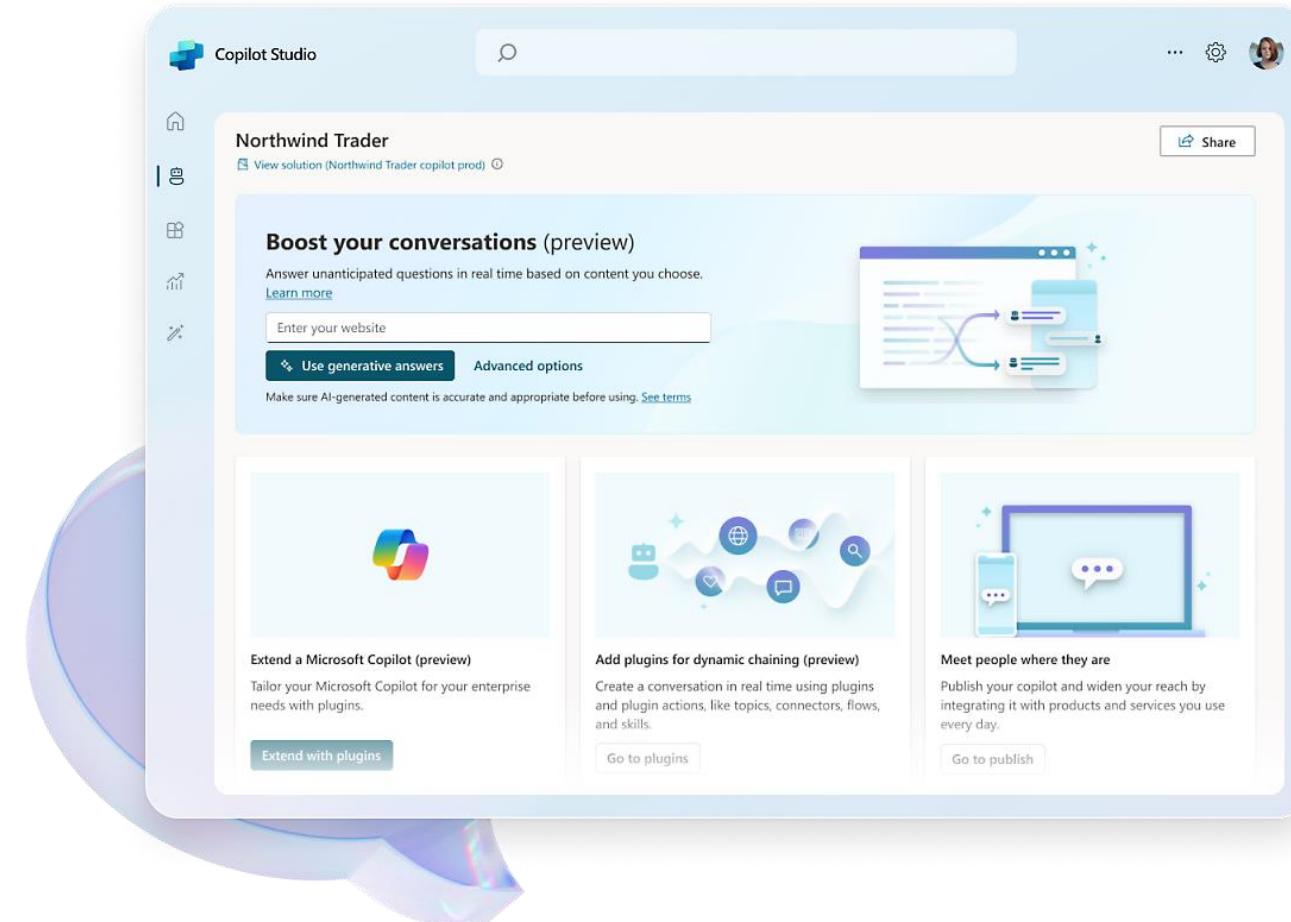
AZURE ML

Quick Help

Score a trained classification or regression model
(more help...)

KNIME



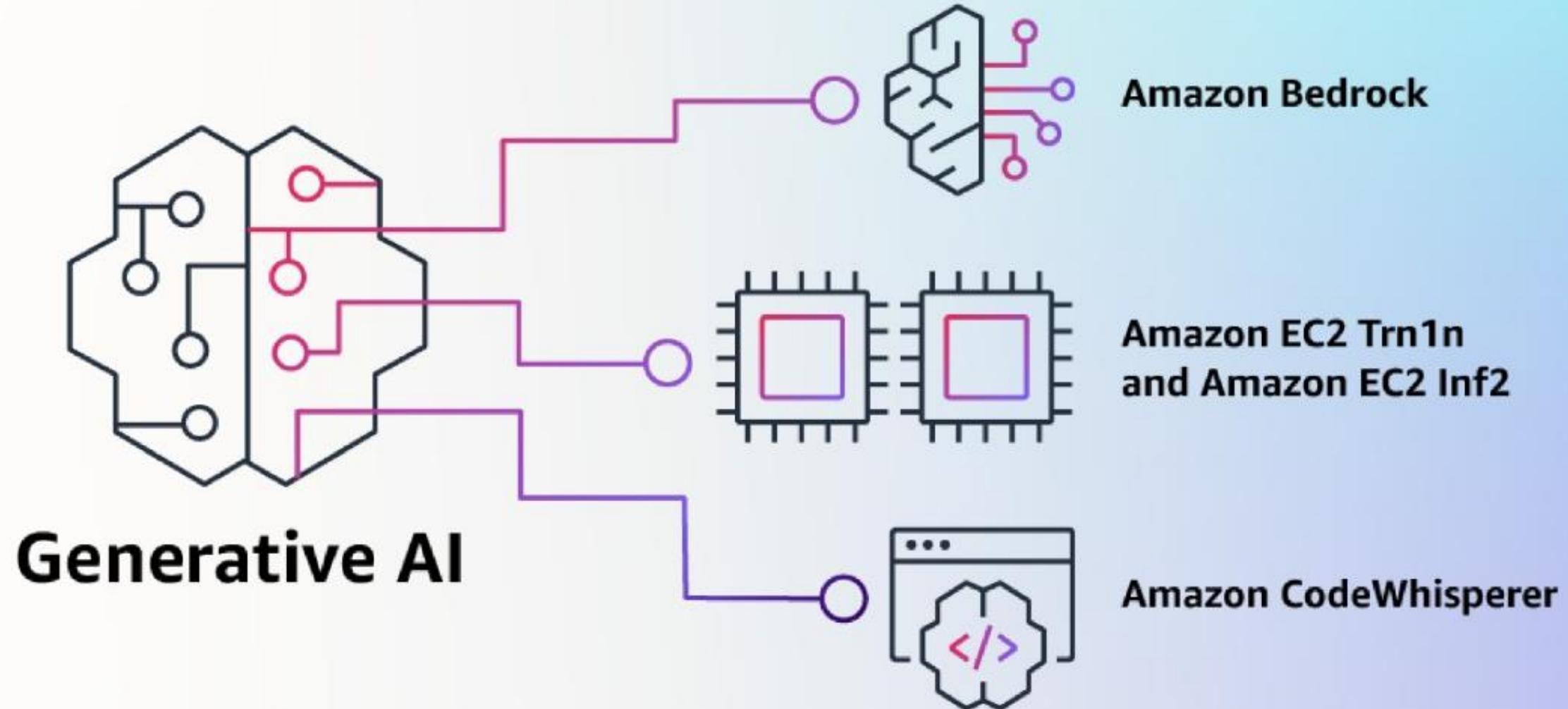


AZURE ML

The screenshot shows the Azure AI | Machine Learning Studio interface. On the left, a sidebar navigation menu includes options like All workspaces, Home, Model catalog, Authoring (Notebooks, Automated ML, Designer, Prompt flow), Assets (Data, Jobs, Components, Pipelines, Environments, Models, Endpoints), Manage, and Compute. The 'Jobs' option is currently selected. The main content area displays a completed job named 'penguin-classifier'. The job status is 'Completed'. The top navigation bar shows the URL https://ml.azure.com/runs/mslearn-automl_0?wsid=/subscriptions/fd3e3786-c21... and the workspace name 'aml-workspace'. Below the status, there are tabs for Overview, Model, Explanations (preview), Responsible AI (preview), Metrics (selected), Data transformation (preview), Test, and Model deployment. Under the Metrics tab, four performance metrics are listed with their values: accuracy (0.9710924), AUC_weighted (0.9990379), average_precision_score (0.9979805), and f1_score_macro (0.9675935). Below these metrics is a 'confusion_matrix' visualization. The confusion matrix table is as follows:

		Predicted Label		
		0	1	2
True Label	0	147	1	4
	1	1	123	0
2	4	0	64	

The color scale for the matrix values ranges from 0 (light blue) to 150 (dark blue).





Services

Search for services, features, blogs, docs, and more

[Option+S]



Oregon ▾



Amazon Rekognition X

▼ Custom Labels

[Use Custom Labels](#)

▼ Demos

[Label detection](#)[Image moderation](#)[Facial analysis](#)[Celebrity recognition](#)[Face comparison](#)[Text in image](#)[PPE detection](#)

▼ Video Demos

[Stored Video Analysis](#)[Streaming Video Events](#)

▼ Metrics

[Metrics](#)

▼ Additional Resources

Facial analysis

Get a complete analysis of facial attributes, including confidence scores. [Learn more](#)

[Leave us feedback](#)[Choose a sample image](#)[Use your own image](#)

Image must be .jpeg or .png format and no larger than 5MB. Your image isn't stored.

[Upload](#)

or drag and drop



looks like a face 99.9 %

appears to be male 99.9 %

age range 56 - 64 years old

smiling 96.2 %

appears to be happy 99.9 %

not wearing glasses 97.6 %

[Show more](#)[Feedback](#)

Looking for language selection? Find it in the new [Unified Settings](#)

© 2022, Amazon Web Services, Inc. or its affiliates.

[Privacy](#)[Terms](#)[Cookie preferences](#)

on Rekognition

s

nd scene detection

oderation

nalysis

y recognition

mparison

age

Demos

nalysis

ional Resources

started guide

d SDKs

er resources



▼ Celebrities



▼ Objects and activities

Furniture Beard Human People Person Audience Crowd
Speech Chair

▼ Moderated labels

No moderation labels detected in this video

▼ Download Response

Download response as JSON file



AWS Services Resource Groups N. Virginia Support

Try Amazon Translate

Amazon Translate

Dashboard Try Amazon Translate

Translate text

Source language: French (fr) Target language: English (en)

Cette valise est d'un excellent rapport qualité prix et présente de très solides atouts :
- Elle est légère (plus que ce à quoi je m'attendais)
- Elle paraît solide (pour l'instant, pas encore

1223 characters, 1268 of 5000 bytes used

closing device!!! This suitcase would have largely stalled its 5 stars with a closing device (lock or integrated ring to pass a padlock) unfortunately it has none.

English is the only supported target language for the selected source language.

Is this translation what you expected? Please leave us [feedback](#)

JSON

View API documentation

Request

```
{ "Text": "Cette valise est d'un excellent rapport qualité prix et présente de très solides atouts :\n- Elle est légère (plus que ce à quoi je m'attendais)\n- Elle paraît solide (pour l'instant, pas encore utilisée en conditions réelles qui seules pourront donner le vrai verdict sur sa solidité)\n- Elle est parfaitement conçue et fabriquée : Matériaux bien choisis et qui renvoient la qualité française, maillottes Select" }
```

Response

```
{ "TranslatedText": "This suitcase is of excellent value and has very strong advantages: - It is light (more than I expected) - It looks solid (for now, not yet used in real conditions that only will give the true verdict on its strength) - It is perfectly designed and made: Well-chosen materials and which breathes quality\nhandles, corners, interior fittings, exterior hollows...). Nevertheless, it has a Select" }
```

Feedback English (US) © 2008 - 2018, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use

VISION STUDIO

Vision Studio

Azure AI | Vision Studio

Destacados Reconocimiento óptico de caracteres Análisis espacial Cara **Análisis de imágenes**

Reconocer productos en estanterías
Vista previa

Identificar los productos en las estanterías, carencias en la disponibilidad de productos y la conformidad de los planogramas.

[Probarlo](#)

Personalizar modelos
Versión preliminar

Entrene modelos de clasificación de imágenes y de detección de objetos personalizados mediante Vision Studio and Azure ML.

[Iniciar un proyecto](#)

Buscar fotos con recuperación de imágenes
Vista previa

Recupere momentos concretos de su álbum de fotos. Por ejemplo, puede buscar una boda a la que asistió el verano pasado, su mascota o su ciudad favorita.

[Probarlo](#)

Agregar leyendas a las imágenes
Versión preliminar

Genere leyendas legibles para todos los objetos importantes detectados en su imagen.

[Pruébelo](#)

Eliminar fondos de imágenes
Vista previa

Quite fácilmente el fondo y conserve los elementos en primer plano de su imagen.

[Pruébelo](#)

Agregar leyendas a las imágenes
Versión preliminar

Genere una frase legible que describa el contenido de una imagen.

[Probarlo](#)

LANGUAGE STUDIO

Cognitive Services | Language Studio

Language Studio

A Get started with Azure Cognitive Services for Language

Use our Natural Language Processing (NLP) features to analyze your textual data using state-of-the-art pre-configured AI models or customize your own models to fit your scenario.

☆ Featured Extract information Classify text Understand questions and conversational language Summarize text Translate text

Check out some of our newest featured capabilities that we are offering in the Language Studio.

 Post call transcription and analytics (Preview)
Batch transcribe call center recordings and extract valuable information such as Personal Identifiable Information (PII), sentiment, and call summary.
[Try out post call transcription](#)

 Summarize documents (Preview)
Extract the most important or relevant information within a document.
[Try it out](#)

Learning resources

Read the documentation
Interpret natural language, classify documents, get real-time translations, or integrate language into your bot experiences.
[Language documentation](#)

Explore our code samples
Explore our samples and discover the things you can build with Language services.
[Code samples](#)

Watch a video (coming soon)
Understand language and infuse intelligence in your apps with Language APIs.
[Video tutorials](#)

Microsoft Learn (coming soon)
Discover new skills, find certifications, and advance your career in minutes with interactive, hands-on learning paths.
[Microsoft Learn](#)

LABORATORIO

