

El futuro de la IA: de MLOps a agentes inteligentes

14 DE AGOSTO DE 2024 | 6 MI

INNOVACIÓN | NACIONAL



leo ✅

@leojr94_

...

generados

CaixaBank ir
generativa p

guys, i'm under attack

l anuncio "Holidays Are

LIDERAZGO | #CAIXABAN



ever since I started to share how I built my SaaS using Cursor



random thing are happening, maxed out usage on api keys, people bypassing the subscription, creating random shit on db



as you know, I'm not technical so this is taking me longer than usual to figure out

for now, I will stop sharing what I do publicly on X

there are just some weird ppl out there

Now
lized
ta

La firma de moda española acaba
creada íntegramente con IA.

9:04 am · 17 Mar 2025 · 53.6K Views

*¿Cuánta confianza
tenemos en la IA?*

Entender cuáles son las
buenas prácticas detrás
de un despliegue de un

modelo de IA

Entender cuáles son las
buenas prácticas detrás
de un despliegue de un

servicio

Monitorización

Colaboración

Integración

Infraestructura como Código

Automatización

Seguridad

Autonomía

Despliegue Continuo

Observabilidad

Código
Construcción
Validación
Integración



Seguridad
Observabilidad
Monitorización
Despliegue



**BIG DATA + DevOps + MACHINE
LEARNING**

MLOps

MLOps

Código

**Preparación
de los datos**

**Entrenamiento
de modelos**

Integración

Seguridad

Monitorización

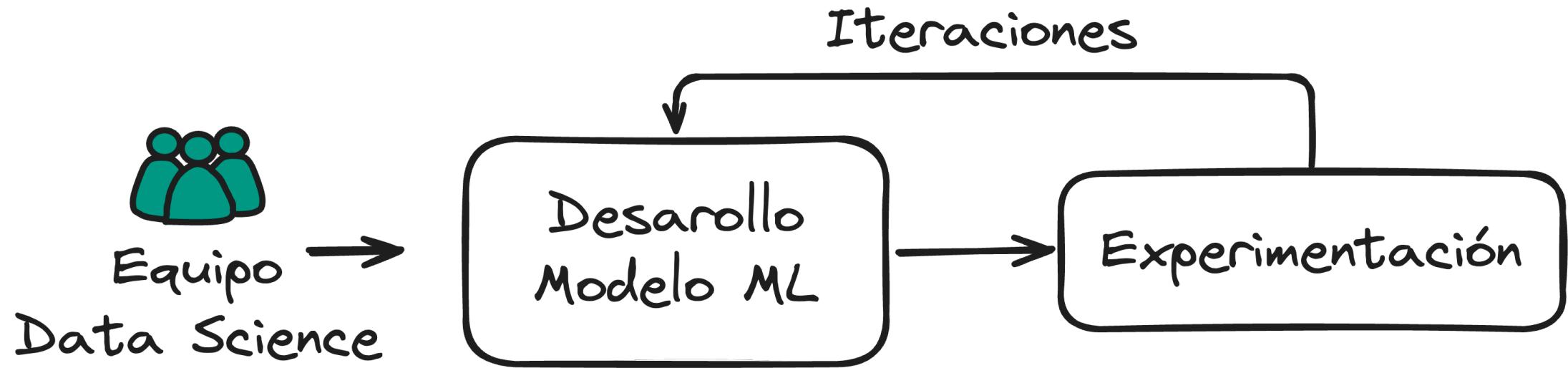
**Evaluación de
modelos**

Despliegue



**MLOps democratiza
el despliegue y el
acceso a los
modelos de ML**

¿Qué significa esto?





Equipo →
Data Science

Notebook

*¿Queremos
productivizar un
Notebook?*



Equipo MLOps

ML Framework



Equipo MLOps

ML Framework

Código

Datos

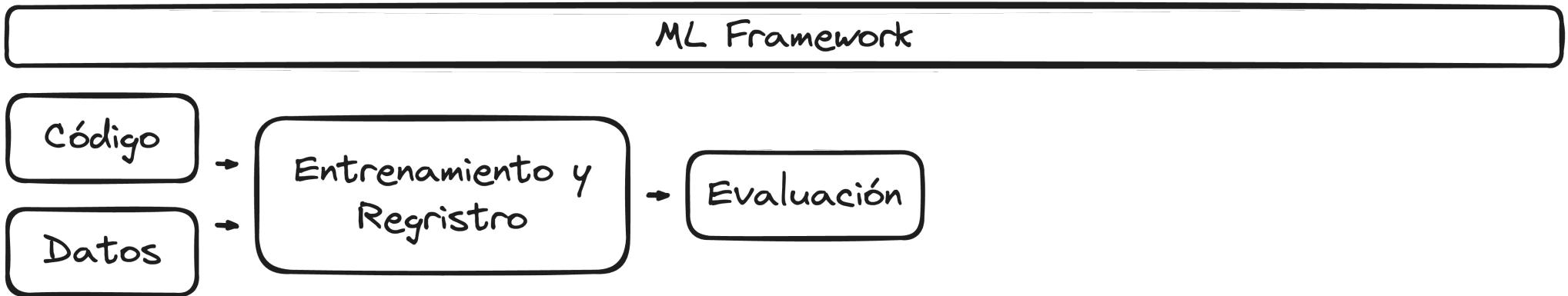


Equipo MLOps



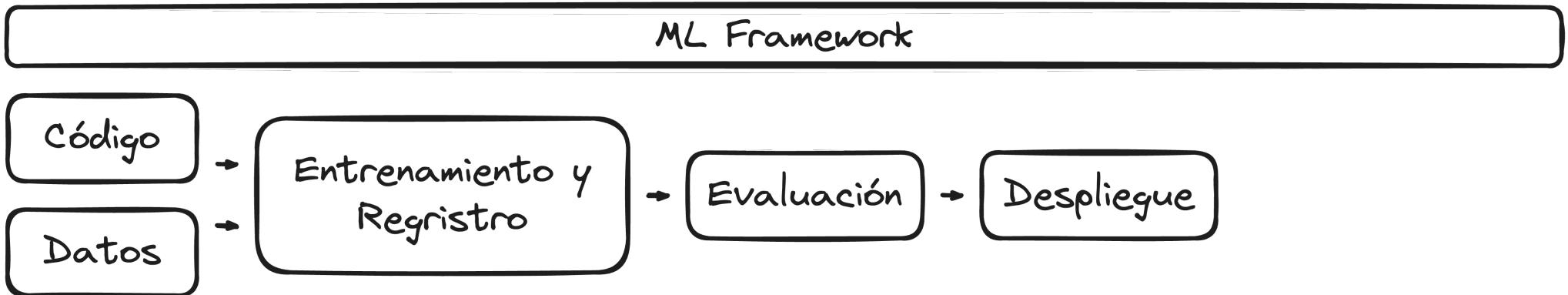


Equipo MLOps



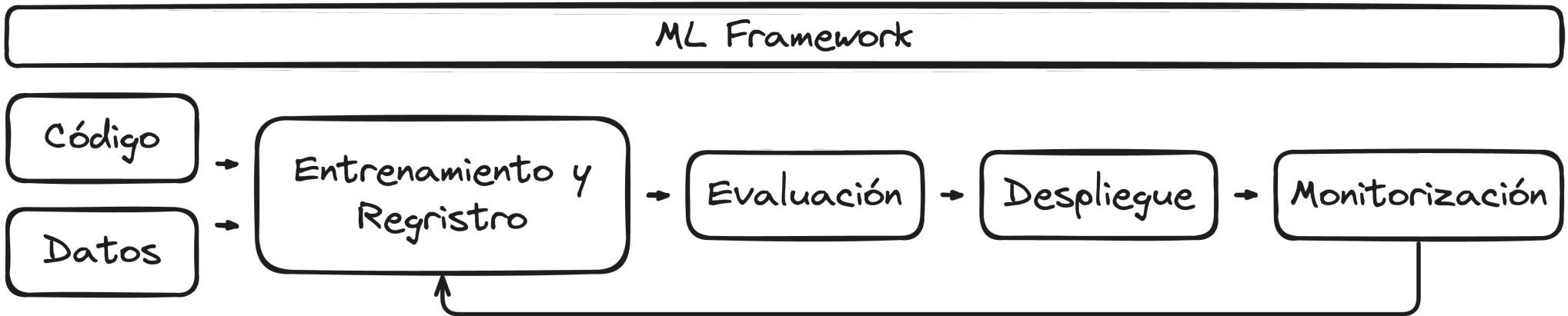


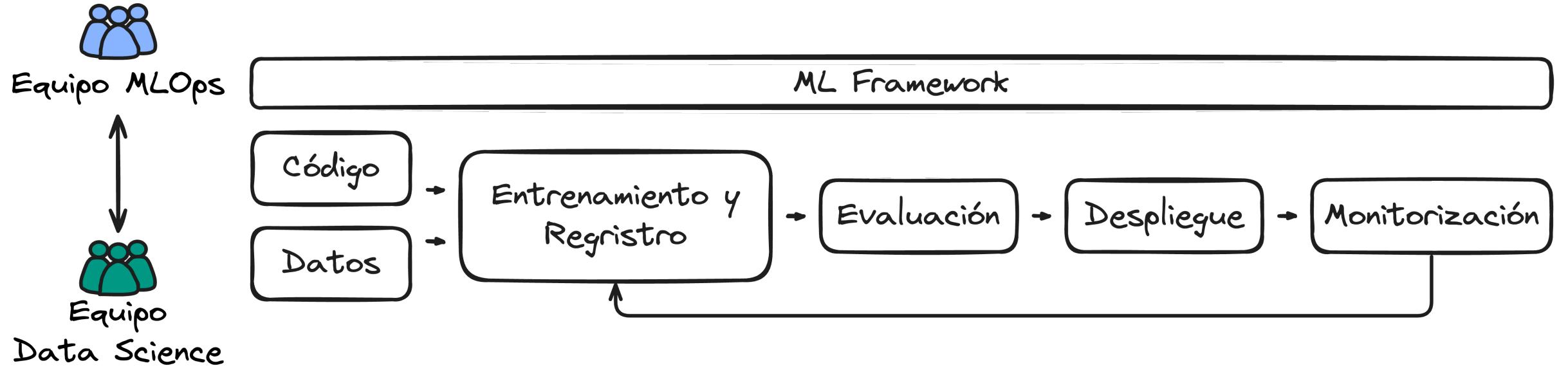
Equipo MLOps





Equipo MLOps

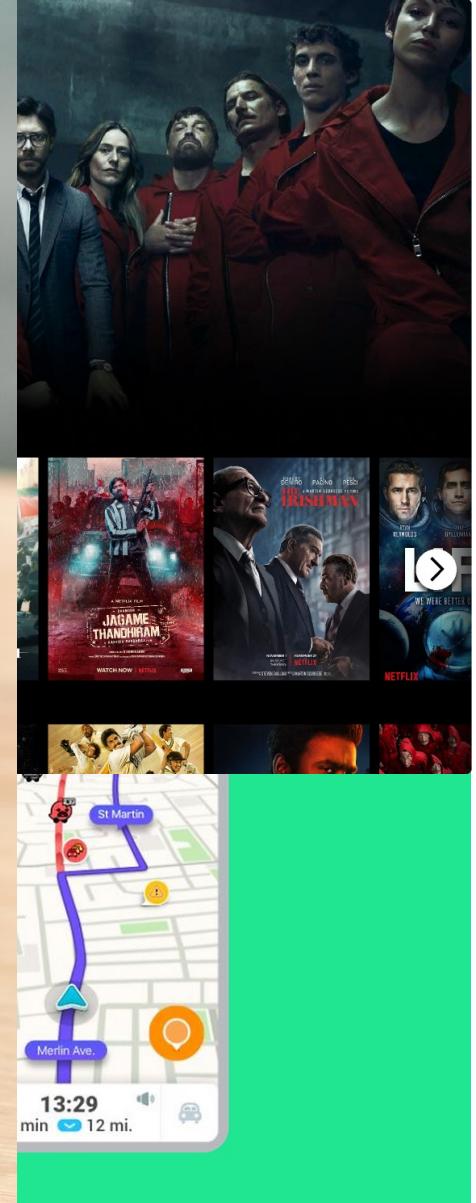
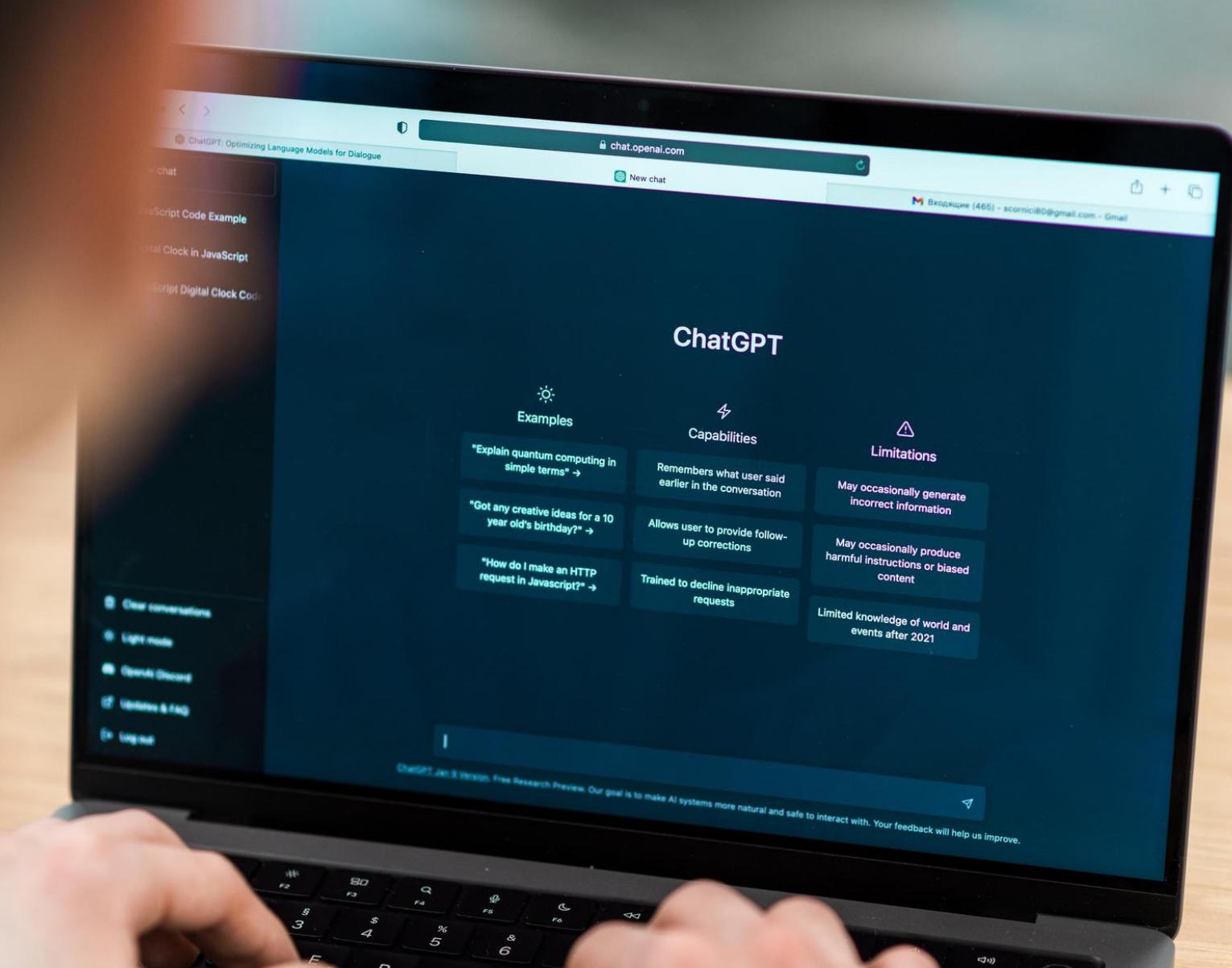




MLOps agiliza el paso de experimentación a producción

*¿Cuánta confianza
tenemos en los
modelos de ML?*

**TODOS
USAMOS ML
CADA DÍA**



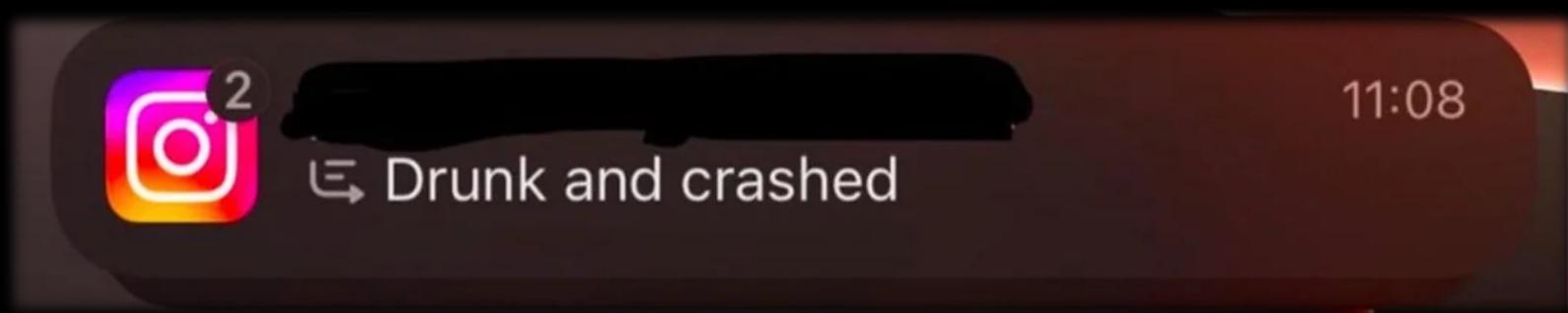
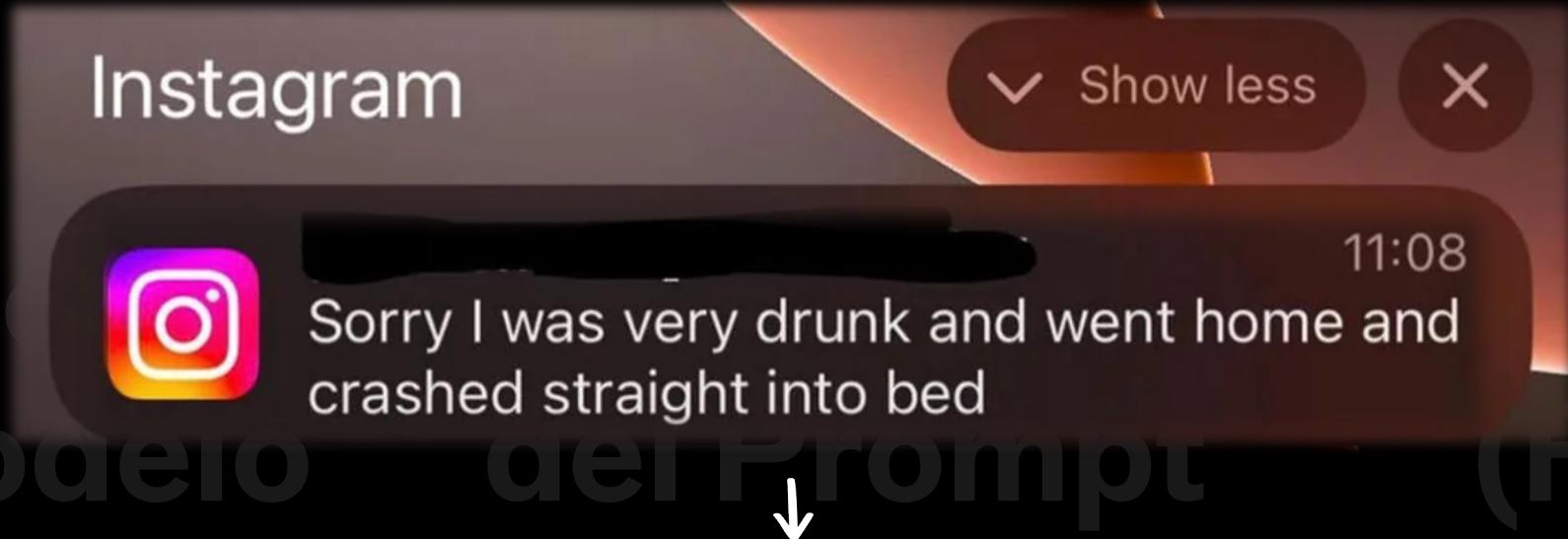
LLMs

¿Qué cambios
aparecen con
los LLMs?



Selección del Modelo de la Prompt

Despliegue ← Seguridad ← Evaluación



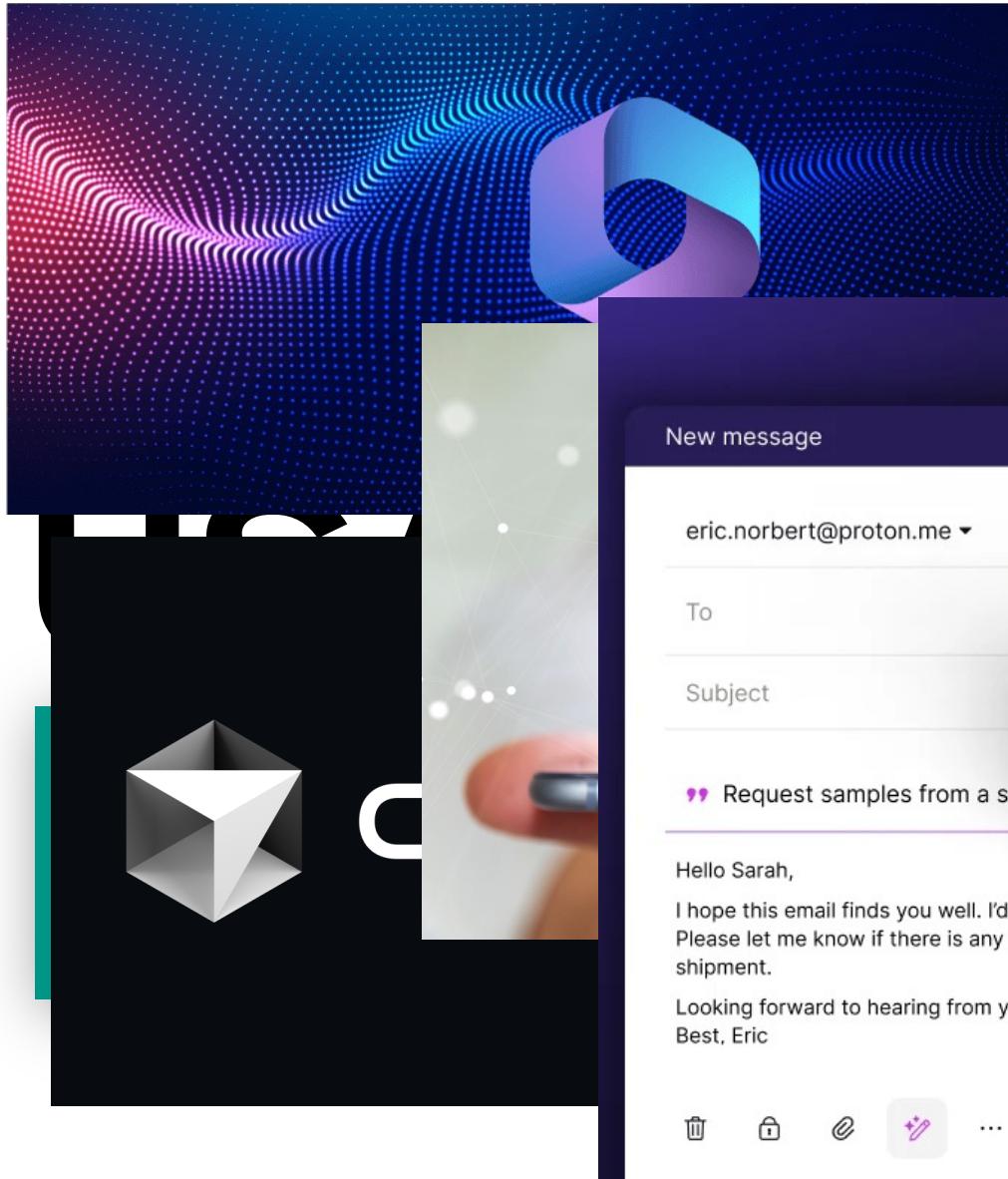




**DevOps, MLOps,
LLMOps agilizan el paso
de experimentación a
producción**

*¿Cuánta confianza
tenemos en los LLMs?*

**TODOS
USAREMOS LLMs
CADA DÍA**



what are the news today



Images

News

Videos

Goggles



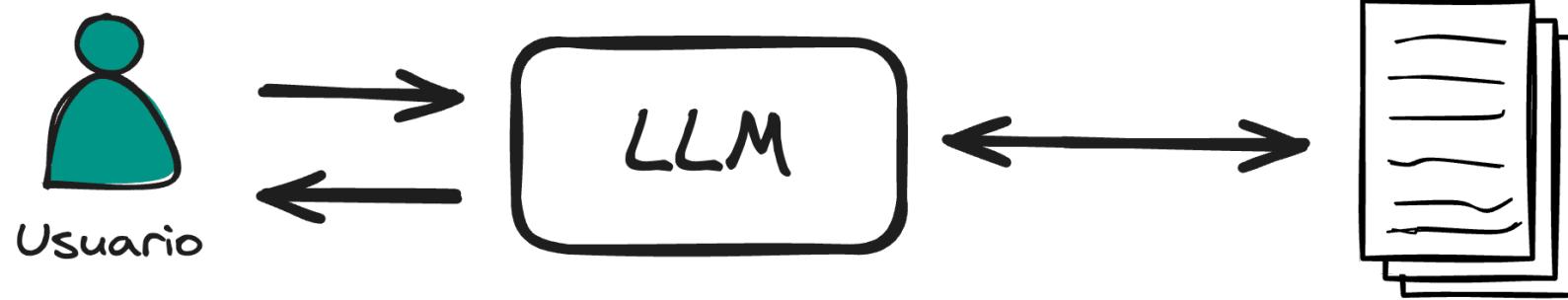
Today's News Headlines

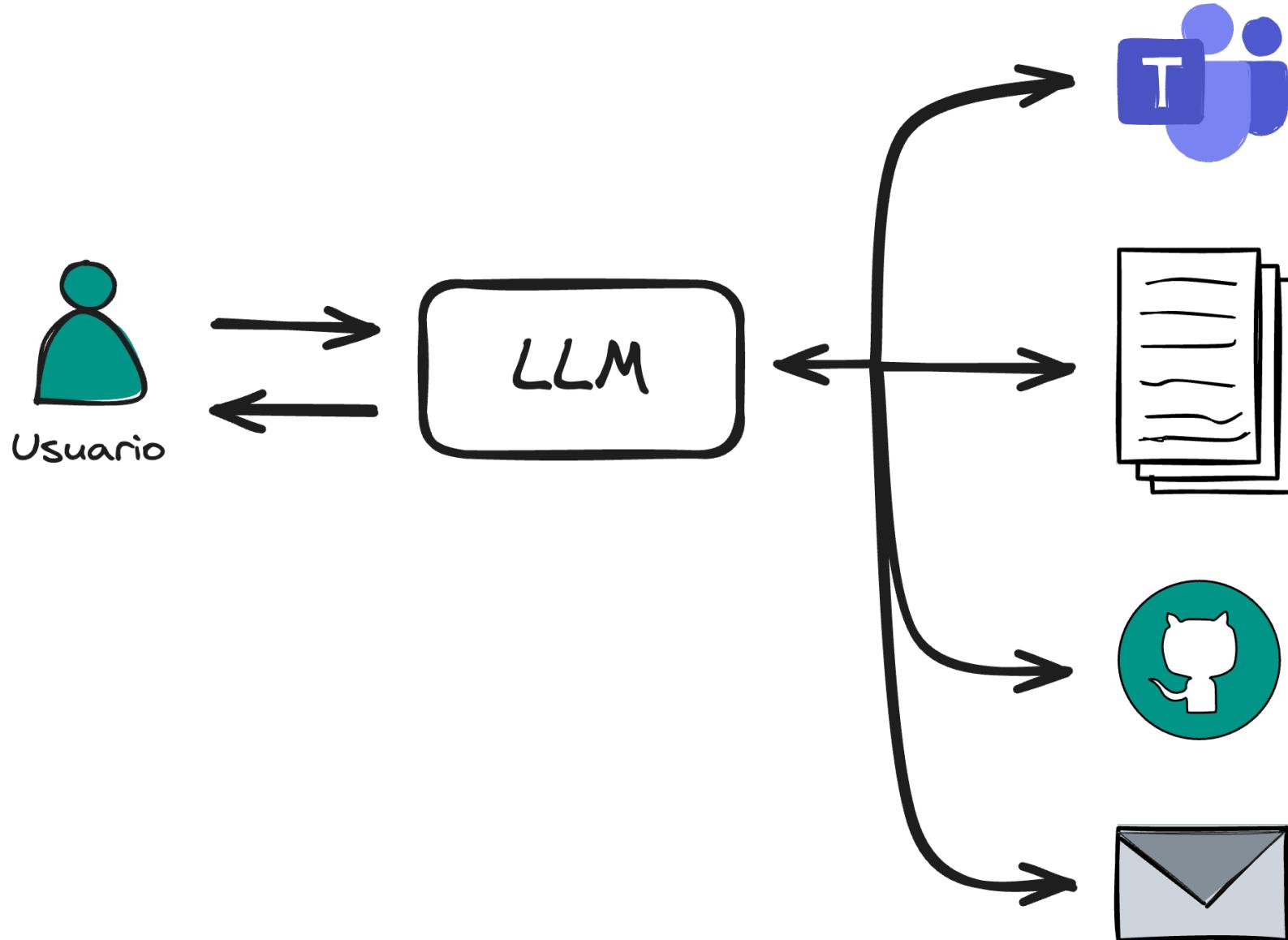
The most recent news includes a Mexican Navy training ship striking the underside of the Brooklyn Bridge, killing two people and injuring more than a dozen others in New York City.^{2 3} Additionally, Russia launched its biggest drone attack on Ukraine since the start of the war, firing a total of 273 exploding drones and decoys targeting Kyiv, Dnipropetrovsk, and Donetsk regions.^{4 5}

- **Brooklyn Bridge Collision:** A Mexican Navy training ship struck the Brooklyn Bridge on Saturday night, resulting in two fatalities and over a dozen injuries. A safety zone has been established around the damaged ship, and commercial traffic in the area has been suspended.^{2 3}
- **Russian Drone Attack:** Russia conducted a large-scale drone attack on Ukraine, deploying 273 drones and decoys across multiple regions. Ukrainian President Volodymyr Zelenskyy called for tougher sanctions against Moscow following the attack.^{4 5}

AI-generated answer. Please verify critical facts.

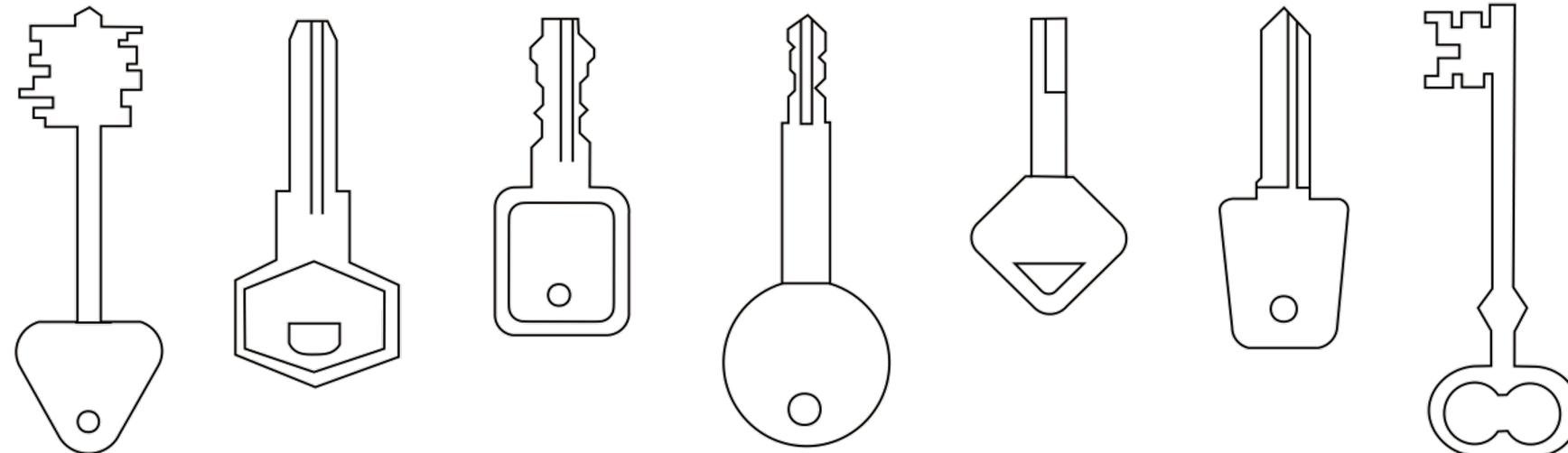
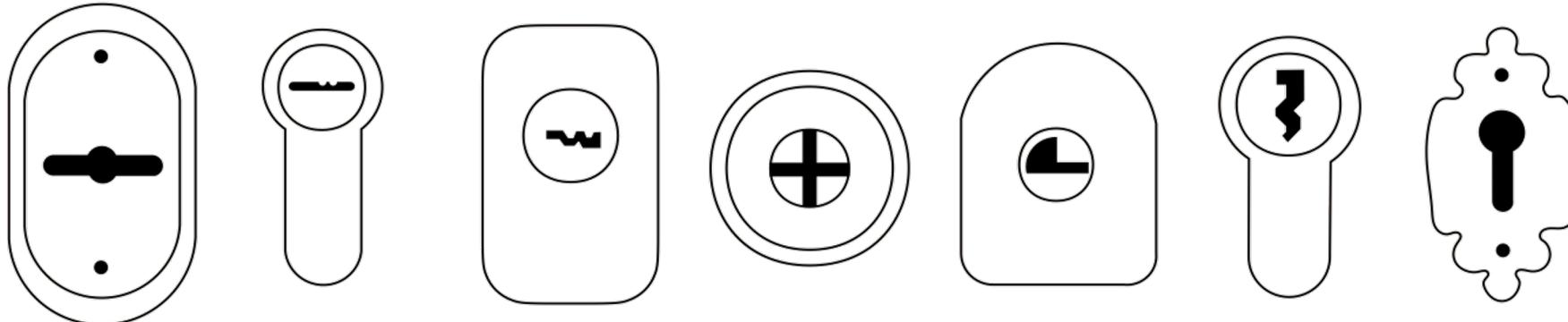
Send





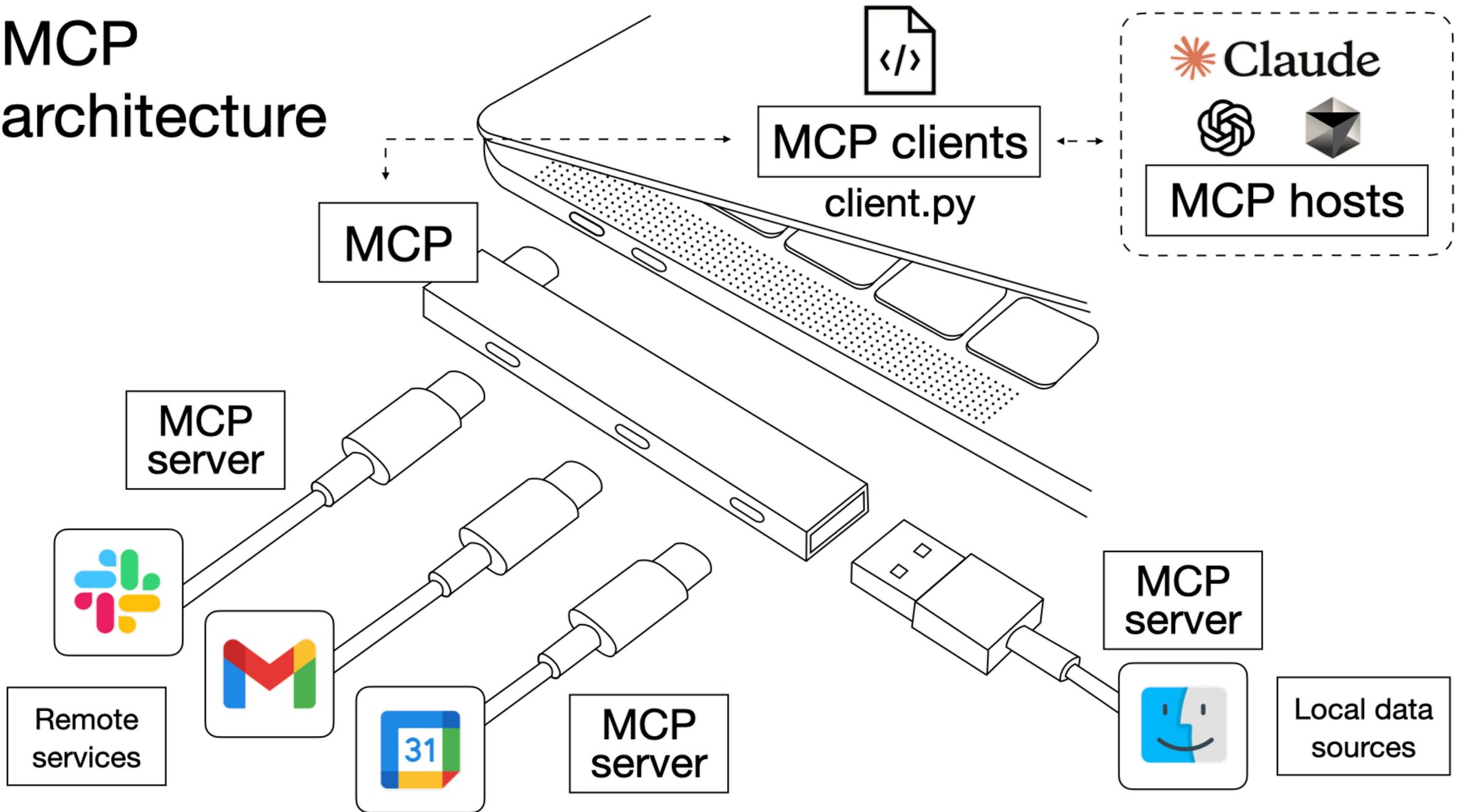
APIs: Every tool needs its own key

Traditional APIs require different authentication and integration for each service,
like needing different keys for different locks



Model Context Protocol

MCP architecture



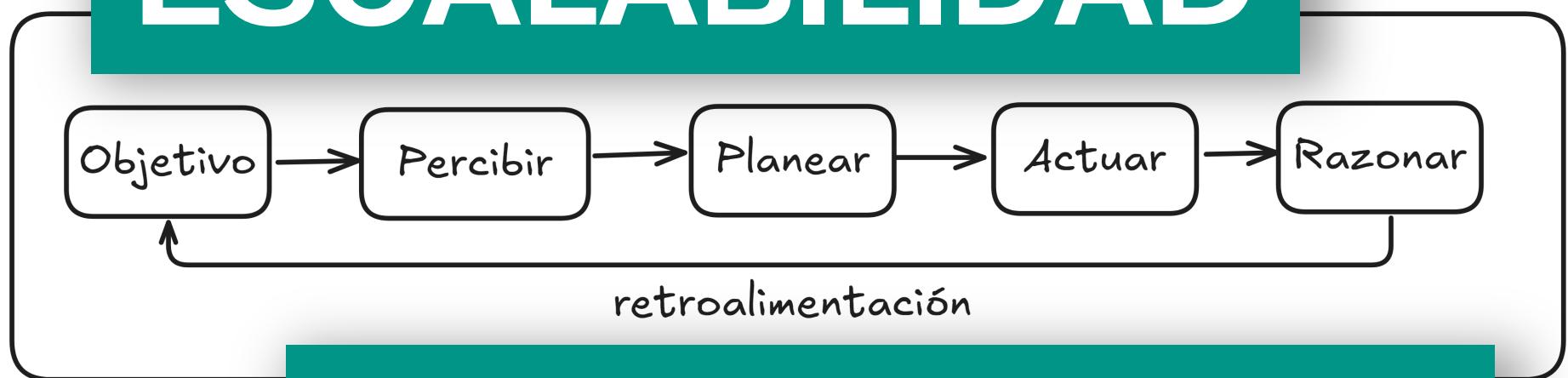
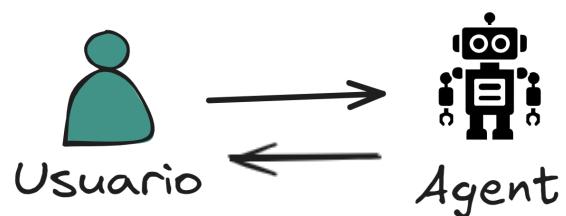
```
"mcp": {  
    "inputs": [  
        {  
            "type": "promptString"  
        }  
    ],  
    "servers": {  
        "Perplexity": {  
            "type": "stdio",  
            "command": "docker",  
            "args": [  
                "run",  
                "-i",  
                "mcp/perplexity-ask"  
            ],  
            "env": {  
                "PERPLEXITY_API_KEY": "${input:perplexity-key}"  
            }  
        }  
    }  
}
```

Un sistema que mediante
un **LLM** puede **planificar** y
decidir qué herramientas
usar con capacidad para
razonar

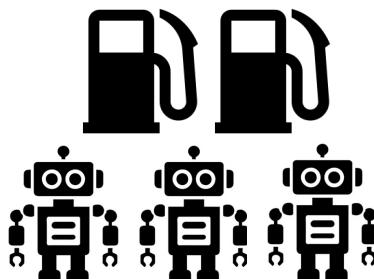
Un sistema que mediante
un LLM puede planificar y
decidir como actuar en
Agentes
usar con capacidad para
razonar

AUTONOMÍA

ESCALABILIDAD

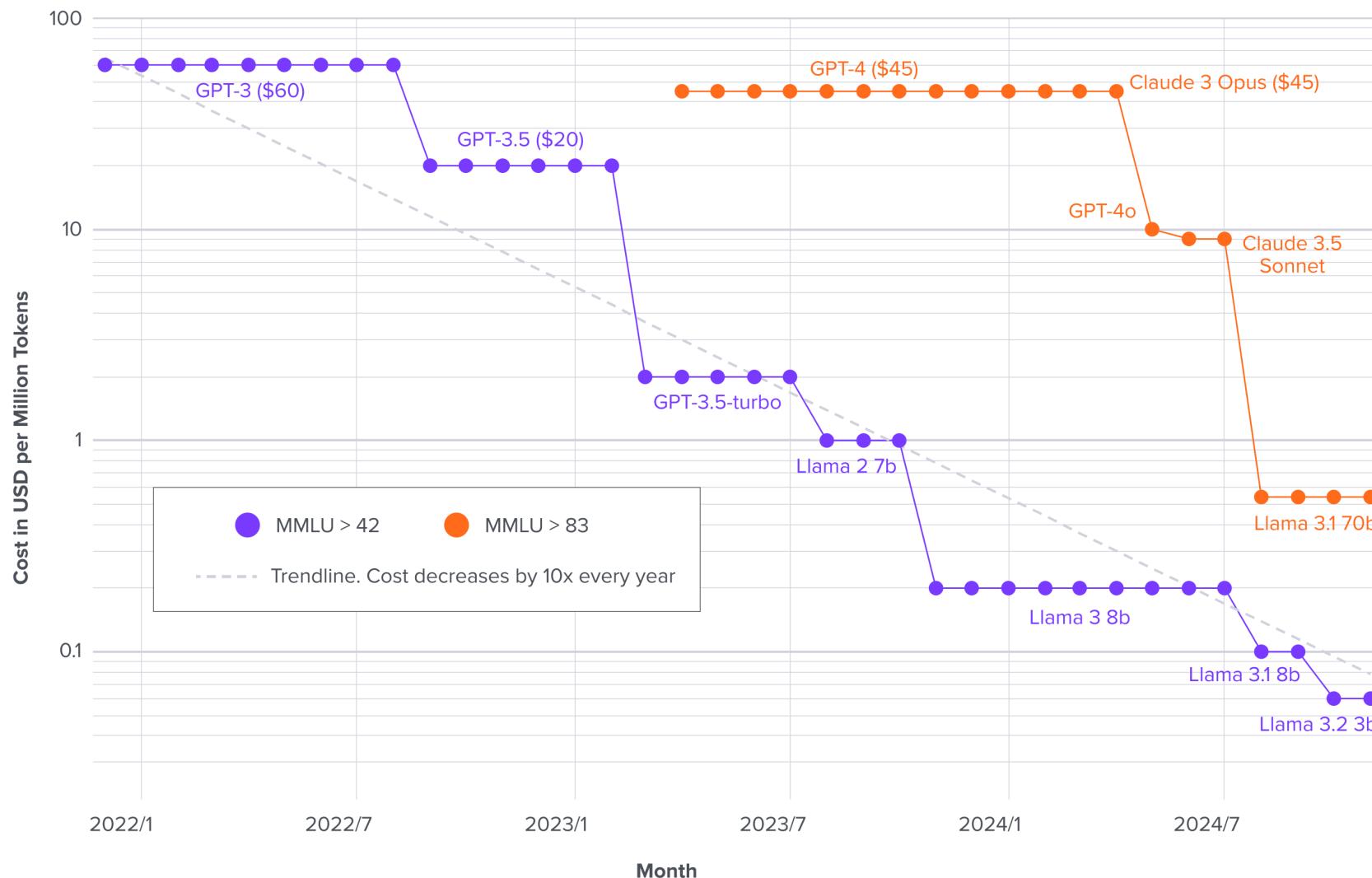


ADAPTABILIDAD



*¿Todo esto
cómo escala?*

Cost of the Cheapest LLM with a Minimum MMLU Score (Log Scale)



El coste de inferencia de LLMs es **1000**
veces menor en 3 años

La nueva métrica de interés es el
tokens/\$/watt



IA Agéntica

*¿Estos agentes son
inteligentes?*

ML TRADICIONAL

LLMs

Agentes

ML
TRADICIONAL

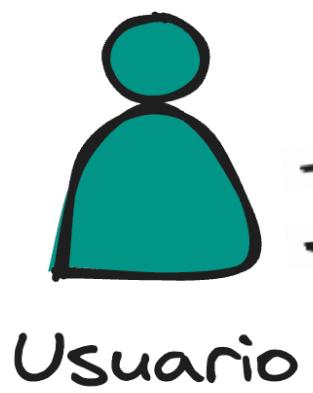
LLMs

Agentes

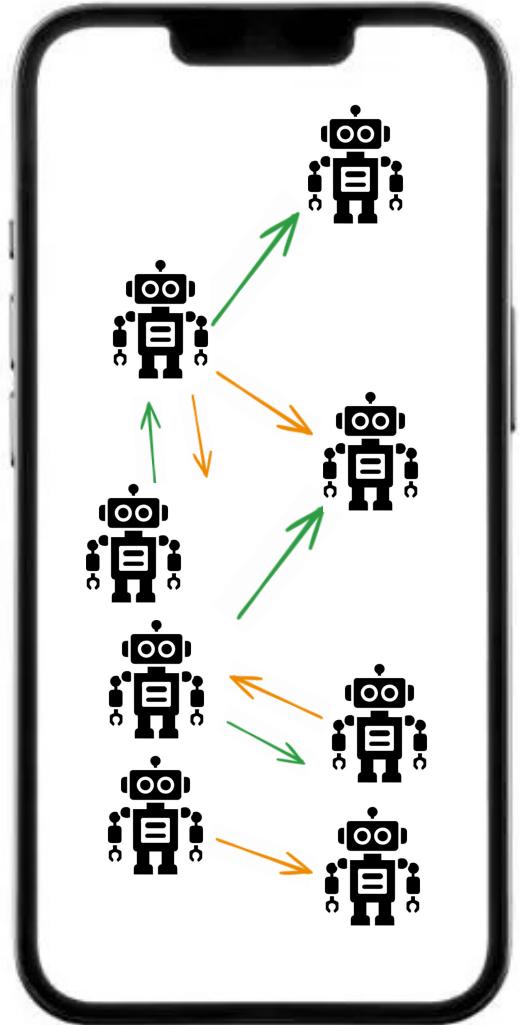
ML
TRADICIONAL

LLMs

Agentes



Usuario



*¿Cuánta confianza
tendremos en los
Agentes?*

AgenticOps

MIL GRACIAS



Sources:

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- **LLM Inference Cost:** <https://a16z.com/llmflation-llm-inference-cost/>
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