

Scaling Enterprise Al: Our Journey with Agents at Iberdrola

Singularity TECHDAY 25

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Mikel Escobar de Carlos

AI/ML Engineer

mescobar@iberdrola.es

Iñigo Gutierrez Narbaiza

Cloud Engineer

igutierrezn@iberdrola.es



#Stechday2025BCN





Hype vs Enterprise value



Hype vs Enterprise value





Hype vs Enterprise value



Direction > Speed

"Maturity and scale come when experiments turn into infrastructure"



The Fine-Tuning Trap

The early assumption

"To understand our business, the model needs to *be trained* on our business."

Reality check

- High cost
- Frozen knowledge
- Maintenance

Iberdrola's stance

Strategic patience:
Research, test but don't
commit

RAG is the new SQL

Decoupled Architecture

Intelligence separate from Data

Auditable

Source included and can be referenced

Real-Time

Instant knowledge updates

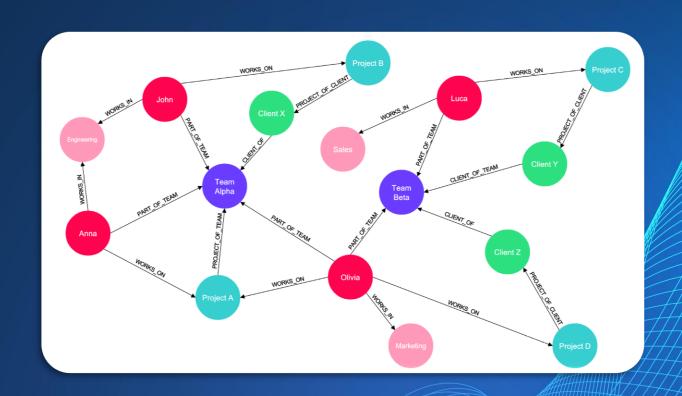
Cheap

Simple to implement and maintain

GraphRAG is...

Graph Retrieval-Augmented Generation enhances standard retrieval by structuring data into a Knowledge Graph:

- Structure: Extracts entities (People, Places, Concepts) and relationships.
- Traversal: Allows the LLM to "walk" the graph to find indirect connections.
- Global Context: Can generate summaries of entire datasets, not just retrieve chunks.



GraphRAG is... an overkill (for us)

Indexing cost

Extracting entities/relationships via LLM is slow & expensive.

Complexity

Requires specialized stack and talent, unlike the commoditized Vector DB ecosystem.

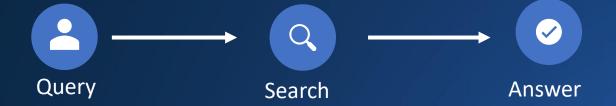
Latency

Too slow for real-time interaction

Our winners

/// Iberdrola

Standard RAG



Our winners



Agentic RAG





RAG changed the way we retrieve information.

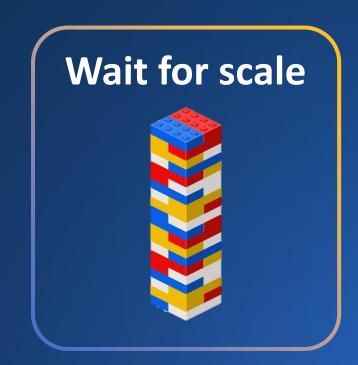
Now, it's time to act on it.

The eternal dilemma



VS

•







The evolution into Agentic Al

MORE HUMAN OVERSIGHT Generative Al assistants

Generative Al agents

Agentic Al systems

LESS HUMAN OVERSIGHT

Follow a set of rules Automate repetitive tasks Achieve a singular goal

Address broader range of tasks

Automate entire workflows

Fully autonomous

Multi-agent systems

Mimic human logic and reasoning

INCREASING AUTONOMY AND BUSINESS IMPACT



I need a refund for my last order

Assistant

Drafts & Suggests

Instantly searches the knowledge base for the refund policy and suggests a polite email response for the support agent to review and send.

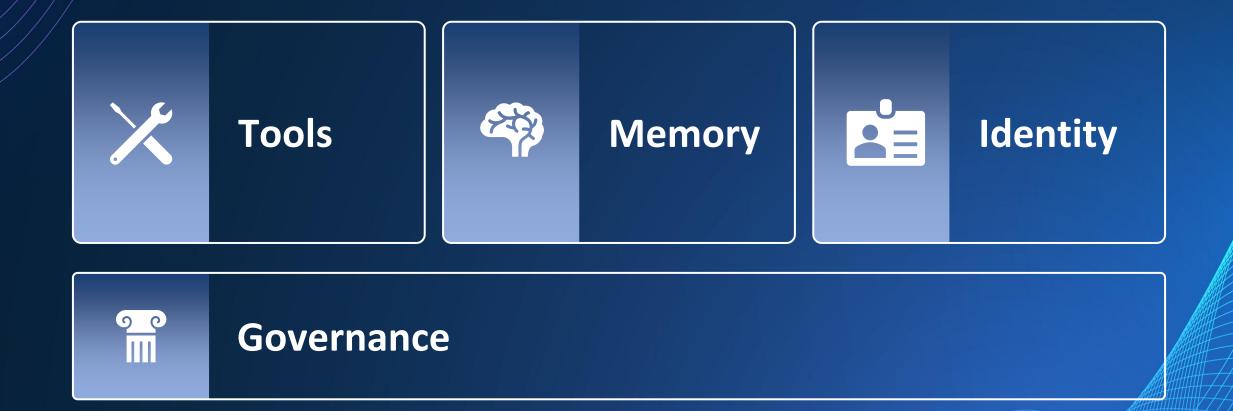
Agent

(\$\frac{1}{2}\)

Executes & Resolves

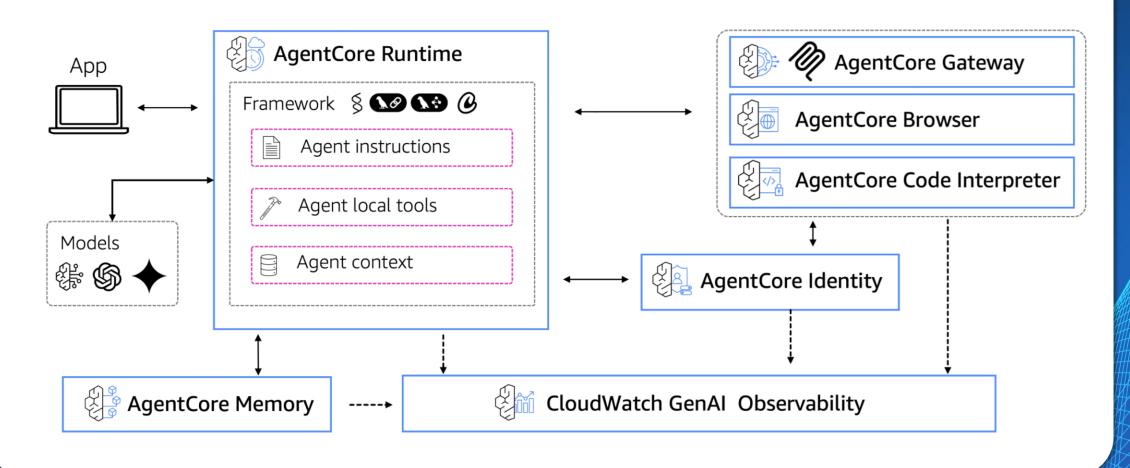
Connects to the CRM to verify eligibility, processes the refund directly in the payment system and emails the confirmation to the customer.

Foundations





Amazon Bedrock AgentCore



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FULL TRANSFORMATION





Agentcore GA

Define bases

Discover Use Cases

GRADUAL TRANSFORMAT.

VALUE CREATION

TOTAL ENTERPRISE TRANSFORMAT.



Improving IT operations

01

Agent-supported change requests

ServiceNow-based change management agents polish requests drafts, ensuring accurate transitions to approvals while reducing delays and resource waste.

02

Incidents enrichment and smart tagging

Agents enrich networking incidents at ServiceNow with context, boosting tagging, assignment, and resolution speed while significantly reducing manual effort and delays.

03

Intelligent change model selection

A chatbot-like agent, connected to a corporate knowledge base, will help petitioners to choose the appropriate change model. This will reduce human errors, time waste and improve UX.

Thank you!

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