HUB TECH IA

AI and IAGEN Application Use Case

Automatic queries - Immediate access to operational information in the Energy Sector in Vaca Muerta

Executive Summary – IAGEN Application for Automated Queries in the Sector Vaca Muerta energy

This executive summary presents a strategic application of generative artificial intelligence (IAGEN) in the energy sector, specifically geared towards the query automation and immediate access to critical operational information in Vaca Muerta. This is a concrete opportunity to improve significantly the efficiency, agility and responsiveness of the ecosystem energy in one of the most important unconventional reserves in the world.

Use case classification

The report classifies this IAGEN application based on the following axes:

1. By main resource: oil, gas and water (comprehensive approach).
2. By activity: information management and decision-making.
3. By technology: generative AI models, natural language processing (NLP), data integration platforms, and intelligent agents.
4. By strategic impact: strategic decision-making and data analysis in real time.

1. Opportunities for using AI and IAGEN in the sector

IAGEN's specific opportunities in Vaca Muerta include the response

automated to frequently asked questions about production, infrastructure, regulation, sustainability and market. Technology allows instant access to key operational information, facilitating reports, simulations and analysis in multiple critical areas such as extraction volumes, transport capacity, regulatory permits, environmental impact and energy market competitiveness.

2. Expected benefits

Among the highlighted benefits are the improvement in the efficiency of processes, reducing operational errors, strengthening data-driven decision-making, increasing internal user satisfaction and external, and streamlining the response to regulatory requirements, environmental and financial.

3. Application of AI

The implementation relies on technologies such as IAGEN and NLP to interpret large volumes of technical documents, integrate multiple data sources, generate automatic summaries and reports and provide real-time responses to through chatbots, smart forms, and corporate dashboards. The solution adapts to existing platforms such as Microsoft Teams, intranets and systems inmates.

4. Proposed AI Agent

The report proposes the development of an IAGEN Composite Agent divided into four phases: gathering relevant documentation, training contextualized model, operational integration with the organization's systems and continuous monitoring. This agent's main function is to automate access to critical information and improve decision-making in the operational environment. Its The main benefit lies in its scalability and ability to adapt to changes. regulatory and efficiency in complex environments.

5. Conclusion

The adoption of IAGEN in Vaca Muerta represents a transformative innovation

for the Argentine energy sector. Its implementation not only optimizes operations and improves organizational response, but also contributes to sustainable development, attracting investment, and consolidating Vaca Muerta as a strategic growth engine. The incorporation of artificial intelligence Generative strengthens a proactive and efficient vision in the responsible exploitation of energy resources.