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GenAI CONSULTING Case Study.

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A Fortune 500 oil and gas exploration and production company's field operations depend on more than 120 specialized in-house applications used daily by a diverse workforce spanning mud engineers, truck drivers, logistics providers, drilling teams, and many others. Each application was purpose-built for a specific domain, and while each worked well in isolation, the requirement to move between them constantly created operational friction for people in the field who needed answers fast.

Project

GenAI multi-agent platform

Client

An F500 oil & gas exploration & production company

Team

150+ total contributors across architecture, dev, & coordination

Scope

20+ AI agents across multiple business domains

The challenge was not the quality of the applications. It was the sheer number of them, and the time and context-switching required to get a single coherent answer across several systems. What the client needed was a unified intelligence layer that could sit across all of those applications and respond to the way people actually work.

The challenge

With 120+ internal applications in daily use, the client's field teams faced a compounding productivity problem. Getting a simple answer, such as the economics of a specific well or the status of a material request requiring sign-off from multiple teams, meant jumping between multiple systems, copying data manually, and waiting on each application individually.

The workforce was also varied. Truck drivers, field engineers, and logistics teams needed tools that met them where they were, not tools that demanded technical fluency. Voice-driven interfaces and chat-based interaction were not just a convenience but a necessity for the broadest possible adoption.

The client engaged Kibernum USA to help architect, build, and coordinate the delivery of a solution capable of meeting that challenge at enterprise scale.

Approach

The solution was designed as a unified AI platform that provides a single intelligent interface across all of the client's internal applications. Rather than replacing existing systems, the platform connects to them through AI agents grouped by business domain, allowing users to interact with any combination of applications through a single conversational interface. An onboarding platform was also created that allows the client's teams to register new AI agents and use cases into the the platform ecosystem independently, without requiring engineering involvement.

The platform's core capabilities include:

- AI-driven access to all 120+ internal applications through a single conversational interface
- Domain-grouped AI agents covering Drilling, HR, Marketing, Contracts, Investor Relations, and more
- Communication tools with full AI-searchable message and history access
- Execution of automated tasks and multi-step workflows across applications
- Exploration of internal knowledge bases using natural language queries
- Chat-driven data visualizations, including voice-activated well maps and dynamic charts
- Analysis of uploaded documents including PDFs and presentations, with automated summarization
- An agent onboarding platform enabling teams to register new use cases independently

Results

The client's field teams and operations staff across multiple roles now interact with more than 120 applications through a single intelligent interface, eliminating the context-switching and manual data aggregation that previously consumed significant time.

The 20+ AI agents deployed cover the full breadth of the client's operational domains. The self-service onboarding platform has shifted the pace of adoption from project-driven to continuous, with new use cases being registered by internal teams on an ongoing basis. Voice-driven interaction has made the system accessible to a workforce that ranges from software engineers to truck drivers.

The engagement itself reflects the scope of the results: a two-person initial architecture collaboration has grown into a 150-person coordinated delivery effort, with Kibernum USA embedded across architecture, development, and program coordination.