

AI-Powered Expertise at Scale

SUMMARY

A global agricultural services company wanted to help internal sales teams manage growing customer demands while improving access to specialized expertise. Source Allies developed a conversational AI assistant that gives employees additional capacity and helps less-experienced staff make informed product recommendations aligned with customer needs and business goals.

APPROACH

Our team designed a production AI system capable of supporting a broad range of agricultural, financial, and customer needs while maintaining quality as capabilities expanded.

- **Specialized Multi-Agent Architecture:** Developed domain-specific agents coordinated by an orchestrator, allowing the system to address diverse needs without relying on a single general-purpose agent.
- **Continuous AI Evaluation:** Established automated functional, smoke, and guardrail evaluations to compare models, measure performance, and monitor quality as functionality evolves.
- **Secure Agent Infrastructure:** Used AWS Bedrock AgentCore to manage conversation memory, identity and authorization, and secure access to MCP servers.
- **Voice and Text Interaction:** Designed both conversational voice and text experiences while addressing latency and model limitations associated with real-time voice interactions.

SOLUTION

Source Allies built a production multi-agent AI assistant that allows crop consultants to interact through text or voice for data-driven answers and recommendations. Specialized agents provide expertise across areas including soil analysis, fertility recommendations, customer financial information, and product selection, while an orchestrator coordinates the experience. A comprehensive evaluation framework continuously tests functionality, quality, and guardrails as new capabilities are introduced.

Results

769

AI evaluations across
10 domains

73

Tools available
across agents

6

Specialized AI agents